

# Public Utilities

Volume 62 No. 3



July 31, 1958

## WANTED — A PROGRAM TO EQUALIZE THE FLOW OF RECESSION

*By Willard F. Stanley*

« »

## Job Balance — A Fresh Angle in Utility Relations

*By James H. Collins*

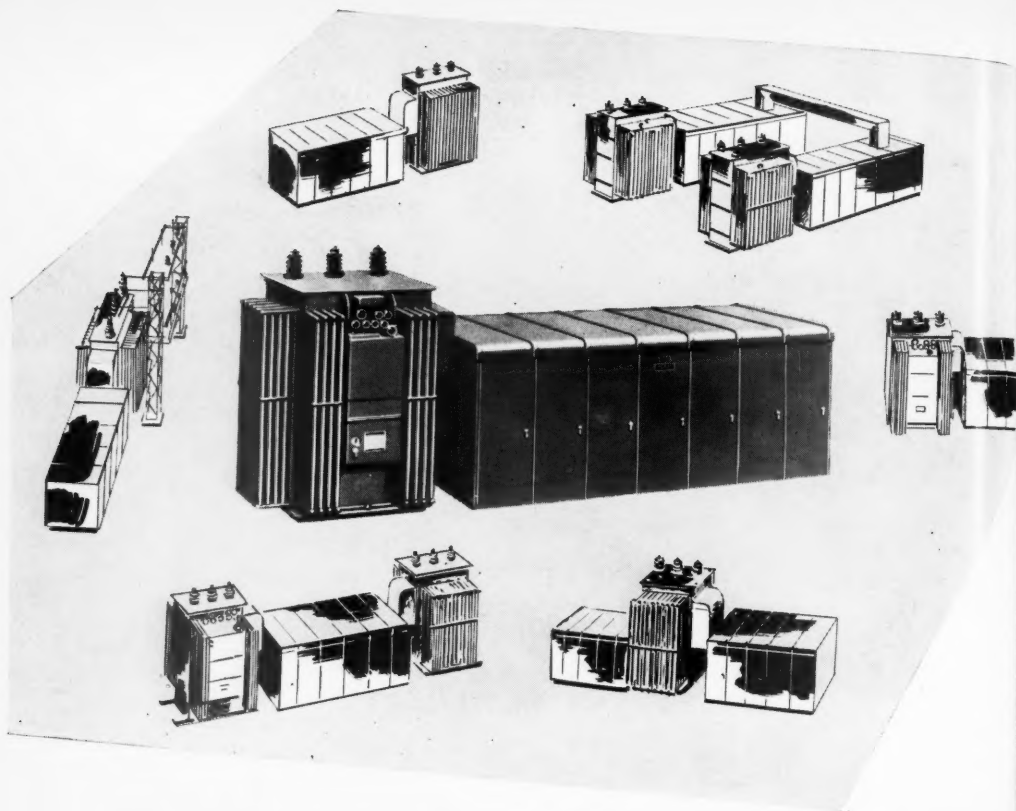
« »

## Utility Supervision during a Period of Recession

*By Alfred M. Cooper*

« »

## CITA Holds Thirty-ninth Annual Convention



## Packaged unit substations mean packaged individuality

**WHATEVER YOUR SYSTEM STANDARDS**, a factory-built unit substation can be designed to meet them. Over 100 major electric utilities have found that versatile packaged units can match the special requirements of their individual systems better and more economically than conventional substations when all cost factors are considered. General Electric Company, Schenectady 5, New York.

512-25

*Progress Is Our Most Important Product*

**GENERAL  ELECTRIC**

# Public Utilities

## FORTNIGHTLY

Editor-in-Chief • ELLSWORTH NICHOLS

Editor • FRANCIS X. WELCH

Associate Editors • RALPH S. CHILD

NEIL H. DUFFY

NORMAN J. BARATT

GEORGE E. TURNER

FORRESTER MAPHIS

Assistant Editors • M. C. MCCARTHY

M. L. WILLIAMS

Financial Editor • OWEN ELY

Advertising Manager • E. L. COOKE

Circulation Manager • E. S. STEVENS

VOLUME 62

JULY 31, 1958

NUMBER 3



### ARTICLES

#### Wanted—A Program to Equalize the Flow of Recession . . . . . Willard F. Stanley 145

Does the traffic in public utility security offerings need better co-ordination or control?

#### Job Balance—A Fresh Angle in Utility Relations . . . . . James H. Collins 153

Intercity rivalry takes some strange twists—especially under economic pressure of a recession.

#### Utility Supervision during a Period of Recession . . . . . Alfred M. Cooper 164

Unemployment and recession bring new factors into play from a standpoint of utility employee supervision.

### FEATURE SECTIONS

#### Washington and the Utilities . . . . . 170

#### Telephone and Telegraph . . . . . 174

#### Financial News and Comment . . . . . Owen Ely 177

#### What Others Think . . . . . 186

CITA Holds Thirty-ninth Annual Convention . . . . . 186

Rate Conditions in Natural Gas Certificates . . . . . 191

#### The March of Events . . . . . 197

#### Progress of Regulation . . . . . 201

#### Industrial Progress . . . . . 20

#### • Pages with the Editors . 6 • Utilities Almanack . . 17

#### • Coming in the Next Issue 10 • Frontispiece . . . . . 18

#### • Remarkable Remarks . . 12 • Index to Advertisers . . 34

### PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Executive, Editorial &

Advertising Offices . . . . . 332 PENNSYLVANIA BLDG., WASHINGTON 4, D. C.

Publication Office . . . . . CANDLER BUILDING, BALTIMORE 2, MD.

Advertising Representatives:

New York 6: Robert S. Farley, 111 Broadway, COrtland 7-6638

Cleveland 15: Macintyre-Simpson & Woods, 1900 Euclid Avenue, CHerry 1-1501

Chicago 1: Macintyre-Simpson & Woods, 75 E. Wacker Drive, CEntral 6-1715

Pacific Coast: M. D. Pugh & Associates

2721 No. Marengo Avenue, Altadena, Calif. SYcamore 7-2894

and  
1050 Lincoln Avenue, Palo Alto, Calif. DAVenport 5-4815

### REPRINTS OF ARTICLES

(200 or more copies)

available on orders received within 30 days after publication date.

Address

WASHINGTON OFFICE

for quotations.

PUBLIC UTILITIES FORTNIGHTLY . . . stands for federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for non-discriminatory administration of laws; for stable and nondiscriminatory taxation; in general—for the perpetuation of the enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied subjects. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

Subscription: Address correspondence to PUBLIC UTILITIES FORTNIGHTLY, circulation department, 332 Pennsylvania Building, Washington 4, D. C. Allow one month for change of address.

Single copies: \$1.00. Annual subscription price (issues a year): United States and possessions, \$15.00; Pan American countries, \$15.00; Canada, \$16.00; all other countries, \$17.50.

Entered as second-class matter April 29, 1915, under the Act of March 3, 1879, at the Post Office at Baltimore, Md., December 31, 1936. Copyrighted, 1958, by Public Utilities Reports, Inc. Printed in U. S. A.

## NEW UTILITY STATIONS, C-E EQUIPPED

includes only new stations on  
new sites placed in operation since  
JANUARY 1, 1950.

LAKE CATHERINE  
HUTCHISON  
YATES  
DUNKIRK  
TITUS  
LEE  
CONTRA COSTA  
HAWTHORN  
NINEMILE POINT  
EDGE MOOR  
PALATKA  
JOHNSONVILLE  
DANSKAMMER  
BECKJORD  
HIGHGROVE  
PLANT X  
BLACK DOG  
ALBANY  
JOPPA  
MERAMEC  
PORTSMOUTH  
LAKE CREEK  
ETIWANDA  
AURORA  
HENNEPIN  
EASTLAKE  
OAK CREEK  
SUWANNEE RIVER  
URQUHART  
KINGSTON  
SANDOW  
MULLERGREN  
BARRY  
NORTH OMAHA  
WILMINGTON  
CARBON  
SAGUARO  
MORRO BAY  
VERMILION  
JOHN SEVIER  
COLLIN  
MILLIKEN  
GALLATIN  
BARRETT  
MITCHELL  
SAN BERNARDINO  
YORKTOWN  
GULF COAST

# TUCSON

# New Tucson Goes on

When Tucson Gas, Electric Light and Power Company recently placed into service Unit No. 1 at their new Station No. 4, another 75,000 kilowatts were added to their system capacity. The event proved to have much more than usual significance, however, for this addition pushed the over-all capacity of privately-owned electric utility plants in the United States over the 100-million kilowatt mark.

No. 1 is the first of four units projected for this station, with a second C-E unit of the same size scheduled for service early in 1960.

Located in the southeastern area of the city of Tucson, this modern plant of outdoor design was planned and erected by Sanderson & Porter, consulting engineers. It will meet the rapidly growing industrial, commercial and residential electrical needs in this section of our expanding Southwest.

Steam for the new Tucson unit is supplied by a 575,000 pound per hour C-E Steam Generator, a description and cross-sectional illustration of which appear on the opposite page.



C-165

## COMBUSTION ENGINEERING

Combustion Engineering Building 100 Madison

ALL TYPES OF STEAM GENERATING, FUEL BURNING AND REFRIGERATION  
PAPER MILL EQUIPMENT; PULVERIZERS; FLARE DRYING



# Station No. 4 into Service

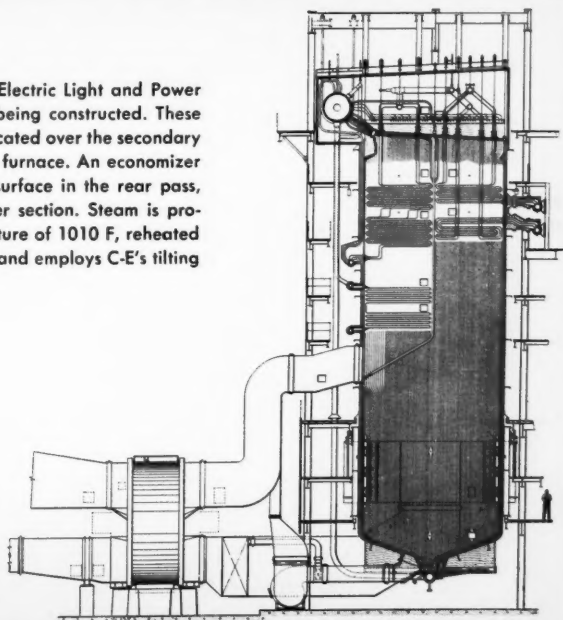


This C-E unit is now in service at the Tucson Gas, Electric Light and Power Company Station No. 4. A duplicate is presently being constructed. These are radiant reheat boilers with a reheater section located over the secondary superheater surfaces, which are directly above the furnace. An economizer section is located below the primary superheater surface in the rear pass, and regenerative air heaters follow the economizer section. Steam is produced at a pressure of 1500 psig and at a temperature of 1010 F, reheated to 1010 F. The unit is fired with natural gas and oil, and employs C-E's tilting tangential burners.

## ENGINEERING

Building 100 Madison Avenue, New York 16, N.Y.

AND RELATED EQUIPMENT; NUCLEAR REACTORS;  
FLUORINATING SYSTEMS; PRESSURE VESSELS; SOIL PIPE



# Pages with the Editors

THE recent startling revelations about the conduct of the House Subcommittee on Legislative Oversight recalls some predictions made in this publication shortly before the beginning of the present calendar year. At that time it was stated that the subcommittee was "planning some uncomfortable moments during the coming year [1958] for federal commissions and regulated industries." It was pointed out that the idea was to show that regulated industries had been "more liberal than proper in dispensing hospitality, etc., and too informal in contacting regulators and commission staff." It was forecast that the Federal Communications Commission would be the first target but that the other commissions would have their turn.

THEN, our annual forecast article went on to make the following observation: "But, as a practical matter, it will be impossible to keep politics out of such a set-up. During the past six years of the Eisenhower administration these commissions have come increasingly under the control of White House appointees. The margin of holdover members from the old Roosevelt-Truman régimes has shrunk, even though that influence remains very considerable at the staff level. In fact, it may be that the combination of congressional

disquiet and staff discussion (extramural) is responsible for much of the rumor and petty charges which the . . . committee staff has been busy running down."

IT now appears that the zeal of the investigators has carried them beyond even the questionable practices of the old McCarthy Committee investigations into Communist sympathizers in government service. Congressmen themselves have objected to the way the subcommittee has disregarded the House's own code of investigating procedure, by allowing and even encouraging the publication of defamatory hearsay testimony without first ascertaining its relevance. Then we have this strange business of planted microphones and burglary of documents. And while the subcommittee members may individually proclaim their innocence, their overall responsibility is perfectly clear.

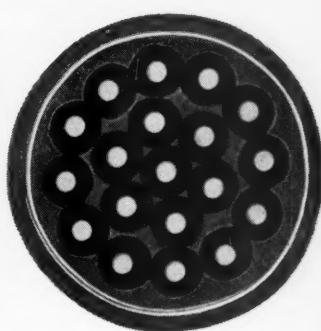
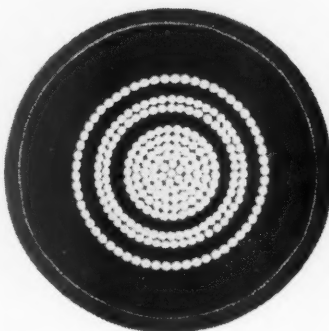
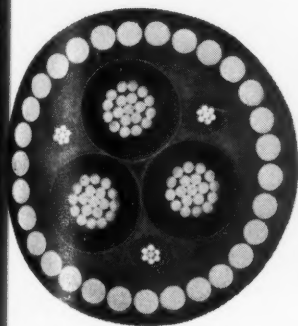
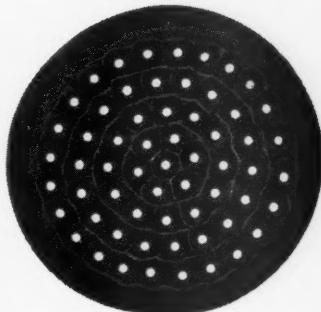
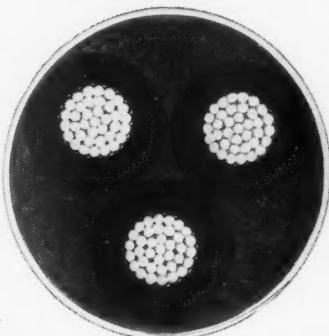
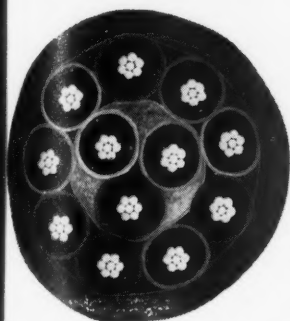
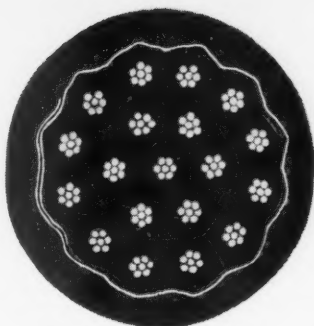
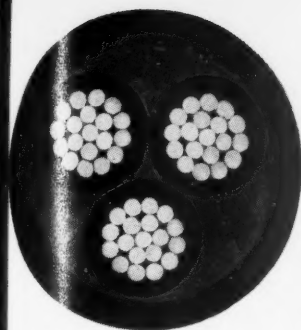
FIRING an imprudent chief investigator will not clear the record, especially while the suspicion remains that he might not have been fired if he had not been caught red-handed planting "bugs." Considering the way the political mind works, it is even fair to ask whether these Congressmen did not know, or have a good idea of, the character of their staff investigators before they were hired. There are quite a few people in Washington who seem to make a living out of professional investigation of that caliber. And their wages, strangely enough, are paid by the taxpayer.

It could be, as the chairman of the subcommittee, Representative Harris (Democrat, Arkansas), suggested, that "bugging" with microphones on behalf of congressional investigators is perfectly legal—even while the courts say that it is not legal as admissible evidence in federal courts. But the average citizen will wonder at the inconsistency of all this. Just



© Paulian Dachrach

WILLARD F. STANLEY



**if** you buy cable...

—take advantage of the unique properties of Kerite insulation. Let a Kerite engineer explain why no other cable can equal Kerite's performance in actual service, dependability, and long-time economy. Kerite cables are designed for a variety of applications and operating conditions, and are available in forms and finishes best adapted to your requirements. Be sure. Specify Kerite.

Our headquarters is at 30 Church St., New York 7. Branches in Ardmore, Pa., Boston, Cleveland, Chicago, Houston, San Francisco, St. Louis, Glendale, Cal.

## KERITE CABLE



—it's the **KERITE** that makes the difference—

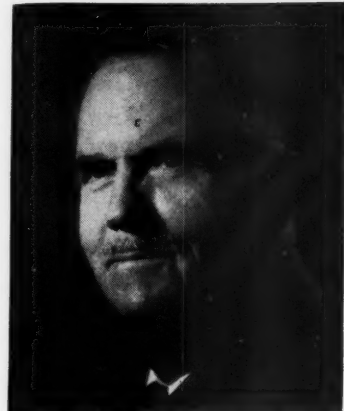


why were such things censurable for the late Senator McCarthy but proper when the targets are regulatory commissions and administrative officials and their businessmen associates? Is there some danger that we may be developing a double standard of ethics for congressional investigators? Does what is "dirty business" in the form of wire tapping or eavesdropping (to use Justice Holmes' phrase) occur only when Congress is investigating left wingers or racketeers? Is it tolerable when a businessman is the target? Those are questions the subcommittee must answer if its investigation is not to become discredited.

THE opening article in this issue presents a very persuasive argument for the timing of sales of securities which should be of considerable interest to financial men as well as public utility officers. Too often public utility companies, and their underwriters as well, have had to absorb a certain amount of loss in proceeds simply because of market pressure due to flooding by simultaneous offerings which could have been avoided. What the situation needs, apparently, is some kind of a financial traffic policeman to keep the offerings moving in an orderly and better planned manner. The author of this article is WILLARD F. STANLEY, former utility executive and now a financial consultant in New York city, who has written a number of articles in business and financial publications. Born in Brooklyn, New York, in 1899, Mr. STANLEY has devoted most of his career to financial corporate accounting, federal tax, and associated matters. From 1931 to 1939 he was associated with Loeb & Eames, Inc., public utility engineers. In 1939 he became secretary and treasurer of General Public Utilities, Inc., and eventually vice president of Southwestern Public Service Company, an affiliate of that system.

\* \* \* \*

UNEMPLOYMENT has created a keen popular interest in the way communities are put together. Some are hard hit, others better off. Better balance in industries seems to be a definite factor. Utilities constantly build for community



ALFRED M. COOPER

and load balance, have things to say to this new relations audience. Beginning on page 153, JAMES H. COLLINS, Washington author of articles about business and the utilities, has written a characteristically entertaining piece about the city conflicts and the way public utility companies have worked out their operating problems in community building. Readers will be amused at the description of the old-time rivalries between various cities and smaller towns.

\* \* \* \*

THE article beginning on page 164 by ALFRED M. COOPER of Indio, California, will be found very instructive to utility supervisors and their superior officers. It is interesting to note the author's reference to psychological factors which occur during a period of recession. Mr. COOPER is a former Kansas public school-teacher who also taught at the University of Southern California. He has supervised employee training for a number of utility companies and industrial organizations. He is contributing editor to a couple of trade magazines and writes from time to time for *U. S. News & World Report* in their educational symposium. His book, "*How to Supervise People*" (McGraw-Hill), is now in its fourth edition, after seventeen years of continuous use.

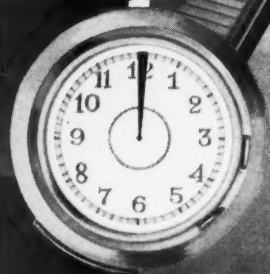
THE next number of this magazine will be out August 14th.

*The Editors*



9:00 A. M. call for service

9:01 A. M. **ACTION**



# KARDEX®

makes it possible—twenty-four hours a day

no matter what time of day or night a call for service comes in—KARDEX Customer Service Location Card enables you to serve customers *promptly and efficiently*. Result? Maximum customer good will at minimum operating cost.

When a call for service is relayed to the clerk at the KARDEX cabinet containing the records of the order, the facts are noted on both a Master and Meter Order Card. Because the Meter Order Card "tells" as the order, *no further writing is necessary*

—and within 60 seconds after the call is completed the Meter Order Card is on its way to the dispatcher for action.

To learn of the many advantages of this system for serving and satisfying, write for FREE illustrated folder "New Horizons In Public Service" to Room 1740, 315 Fourth Avenue, New York 10, New York.

**Remington Rand**  
DIVISION OF SPERRY RAND CORPORATION



# Coming IN THE NEXT ISSUE

(August 14, 1958)



## **CURRENT ASPECTS OF THE COST OF CAPITAL TO UTILITIES**

Public utilities generally face a competitive capital market in which the investor must be attracted and offered terms which will meet those of nonregulated industry. Professor Fred P. Morrissey of the University of California has considered and analyzed relationship of earnings, dividends, and market price of common equity for 27 electric utilities from 1950 to 1956, inclusive. He has explored the difficulties of selecting "companies with comparable risk." He suggests that much remains to be done in the determination of cost of equity for utility companies, and that both regulatory commissions and academic economists must pursue research on the problem with vigor and imagination.

## **NUCLEAR POWER ABROAD IN MID-1958. PART I.**

The pending United States-EURATOM agreement, now before Congress, is designed to spur progress in the development of nuclear reactors in Europe. In addition individual countries abroad, Italy, France, and Japan, are exerting themselves to make more rapid headway towards the goal of atomic power development which will be economically competitive with electricity generated from conventional fuel sources. In this two-part article, Herbert M. Bratter, financial and economic writer of Washington, D. C., has checked the available projects, including cost and capacity, and has given us a roundup story on what plans are now "in the works" for nuclear progress abroad. The first instalment will deal briefly with the background of foreign atomic development, including Calder Hall in Great Britain, and the special economic problems of western Europe.

## **CWA POLICY TOWARD REGULATORY COMMISSIONS**

Should the players select the umpire? Dr. William J. McKenna, assistant professor of economics at Temple University in Philadelphia, has examined the interesting question raised by the decision of the communications workers' union to take a position on regulatory commission policy in telephone rate cases. The CWA is the union which has organized many of the workers of the Bell system. Last January the union adopted a policy statement proposing that it intervene actively in the regulatory machinery of the communications industry: first, by influencing the appointment or election of members of regulatory commissions, and, secondly, by concerning itself directly with the problem of rates and the reasonableness of the return allowed telephone companies. This policy, in this author's opinion, represents an important departure from the traditional rôle of the labor union. Is it in conflict with the nature and spirit of public utility regulation, and could it impair confidence in the impartiality of these commissions?



**Also . . . Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.**

# "One-Step" analyses

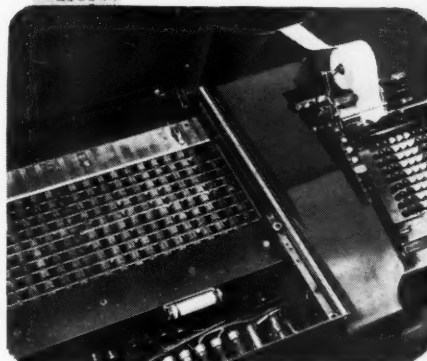
## ... long step toward better rates

CONTINUING monthly billing analyses produced by the "One-Step" Method\* provide—complete, accurately documented data on past and present operations, plus a sound base for forecasting future ones. Having data in depth on these important factors is indeed a *long* step toward securing better rates, because they present to commissions unassailable facts which help to justify the granting of rate increases. In the 20 years we have served utility companies R & S analyses have figured prominently in hundreds of rate cases—commissions know and respect the validity of our work, a plus factor in your favor.

Using the "One-Step" Method is simplicity itself, because all the work is done in our office, neither your personnel nor equipment are required. Cost-conscious utility executives will be pleased with the modest cost of our service; less in fact than preparation by their own staffs, and production of data is much faster.

We would like to send you a copy of our booklet fully describing the "One-Step" Method of Bill Analysis—a request to Dept. P will bring your copy.

33110451  
6602  
640405  
10003189  
33  
567306  
6403  
10533701  
4471  
55503  
304057  
442  
64105006  
6089  
640033  
363706  
3100  
560000  
3600  
707565  
6000055  
77886  
6000704  
49054  
7  
87040021  
606  
300705  
30076  
344474  
42233653  
42200676  
42206000  
11040640  
33330440  
44205540  
506500  
5055043  
5000760  
576  
4400003  
333  
2233000  
35066  
45500704  
3430  
4233304  
65555  
7000066  
33050  
71200111  
677771  
323340  
7555454  
776  
4550  
23060  
2337754  
7877  
45566543  
8586  
112265  
2233054  
120250



\*The "One-Step" Method, exclusive with R & S, is made possible by this machine of our invention.

344023  
33080  
112200  
433087  
693080  
777760  
112266  
340070  
668870  
3400600  
87  
100660  
76170  
700000  
1200603  
41226034  
787  
36002853  
54776  
650600  
330222  
23330776  
40230022  
217  
77006  
33080  
33080  
440000  
500000  
33000030  
60002505  
200064  
30764  
4700  
2000970  
2400230  
406  
2330880  
537000  
312270  
20097630  
26344883  
23122764  
2120022

### RECORDING & STATISTICAL CORP.

100 SIXTH AVENUE  
NEW YORK 13, N. Y.

# Remarkable Remarks

*"There never was in the world two opinions alike."*

—MONTAIGNE

WILLIAM MCCHESENEY MARTIN, JR.  
*Chairman, board of governors,  
Federal Reserve System.*

"... over all, we are all dependent upon savings—the strength of this country, our ability to resist the alien philosophy from abroad, our ability to finance our needed expenditures."

EDMOND H. LEAVEY  
*President, International Telephone  
& Telegraph Company.*

"Each day we move closer to realization of the modern concept of world relationship. [A concept that is] based on the assumption that problems between peoples and nations can be eliminated through better communications."

T. COLEMAN ANDREWS  
*Former chief, Internal Revenue  
Service.*

"The tax form cannot be simplified until the tax law is simplified. The only thing that keeps the income tax going is the withholding feature of the tax. The income tax wouldn't last a year if the withholding feature was eliminated."

EDITORIAL STATEMENT  
*Los Angeles Times.*

"... it is a sin, however you look at it, for a government to try to pay operational expenses out of anything except the regular revenues. Pay as you go ought to be the Eleventh Commandment, with nothing so holy as the reserve."

DWIGHT D. EISENHOWER  
*President of the United States.*

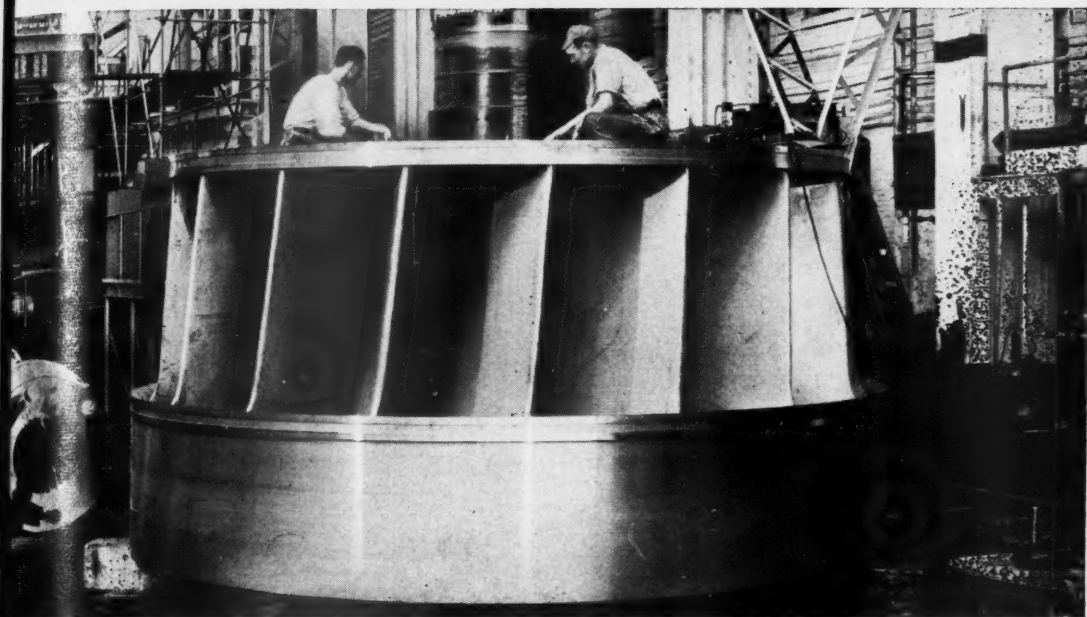
"... one of the greatest elements of American strength is its free economy. The right of 173 million people to make their own decisions in the economic field, and in doing so to be responsible for the progress and the prosperity of this great nation."

MILTON FRIEDMAN  
*Economist, University of Chicago.*

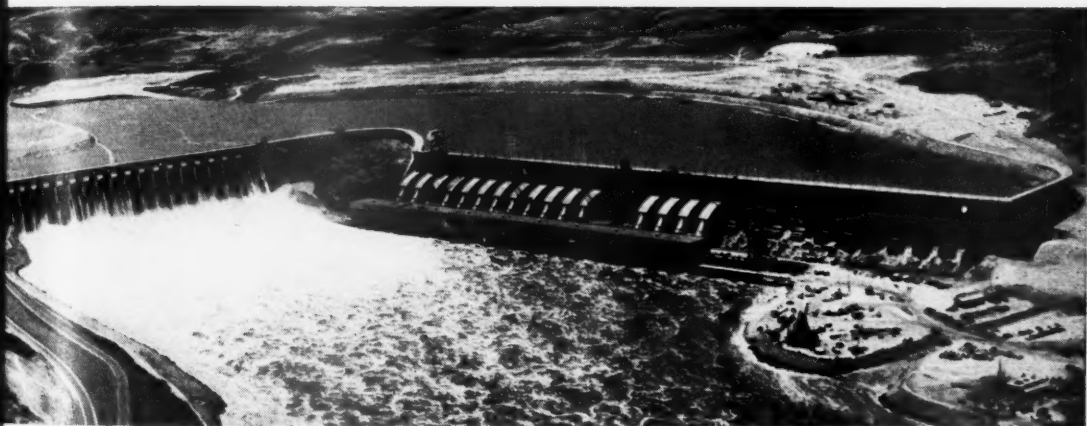
"Political freedom means the absence of coercion of a man by his fellowmen. The fundamental threat to freedom is power to coerce, be it in the hands of a monarch, a dictator, an oligarchy, or a momentary majority. By removing the organization of economic activity from the control of political authority, the competitive enterprise market eliminates this source of coercive power. It enables economic strength to be a check to political power rather than a reinforcement."

ROBERT E. GROSS  
*Chairman of the board, Lockheed  
Aircraft Corporation.*

"In the early days of our Republic, our goal was 'life, liberty, and the pursuit of happiness.' We must not substitute for these great aspirations the softer slogan of 'comfort, reassurance, and the pursuit of security.' ... More and more, our citizens are putting their money into private and government pension funds and insurance plans. They help the economy, no doubt. And they purchase security, I suppose. But I wonder if there isn't such a thing as too much security, and if the price we pay for it isn't too great."



## Newport News builds 10 unique runners



## For Chief Joseph Dam in Washington State

**Cast buckets are welded to cast crown  
and band—then stress relieved**

Francis-type runner above illustrates Newport News complete facilities for fabricating heavy equipment.

Also illustrates the specialized techniques Newport News frequently uses in jobs of this type. Gibson tests these units are very favorable.

Before you go ahead on a project like this, be sure to get a bid from Newport News. Whether it's penstocks, butterfly valves, pumps or turbines, you'll get the benefit of the modern plant methods and production facilities of one of the country's oldest and largest builders of water power equipment.

**Newport News**  
Shipbuilding and Dry Dock Company  
Newport News, Virginia

Engineers... Desirable positions available at Newport News for Designers and Engineers in many categories. Address inquiries to Employment Manager.





Shown: New Dodge Tradesman—a pick-up with side

## You get extra quality at no extra cost— Dodge is one of the low-priced 3!

You may be surprised to know, for instance, that a standard Dodge *Power Giant* V-8 pick-up costs \$2.66 less than pick-up "F", and only \$5.50 more than pick-up "C" . . . that a rugged Dodge *Power Giant* panel costs less than either panel "F" or panel "C". Yet Dodge *Power Giants* give you many more advantages, leading the low-priced three in all four important ways:

**First in power!** Discover the extra traffic pep and extra pulling power that you get from *Power Giant* V-8's, with up to 27.5% more power than competitive trucks.

**First in payload!** You'll find you get as much as  $\frac{1}{3}$  more payload per trip, because *Power Giant* construction adds extra strength without adding weight. You save trips, man-hours and fuel!

**First in economy!** In addition to low first you save with exclusive Dodge Power-Dome engine design that gives you extra gas mileage reduces power-robbing carbon deposits.

**First in styling!** Your business gets a prize bonus with a Dodge *Power Giant*. Its striking headlights, massive new grille and flowing, sculptured lines set new truck styling trends.

Despite all their advantages, Dodge trucks are priced with the lowest. So before you buy any truck, look into these handsome, rugged new *Power Giant*. Compare trucks, and compare prices. See your Dodge dealer soon, and get his special Anniversary deal!

\*Based on official factory-suggested retail V-8 prices.

4-way leaders of the low-priced 3

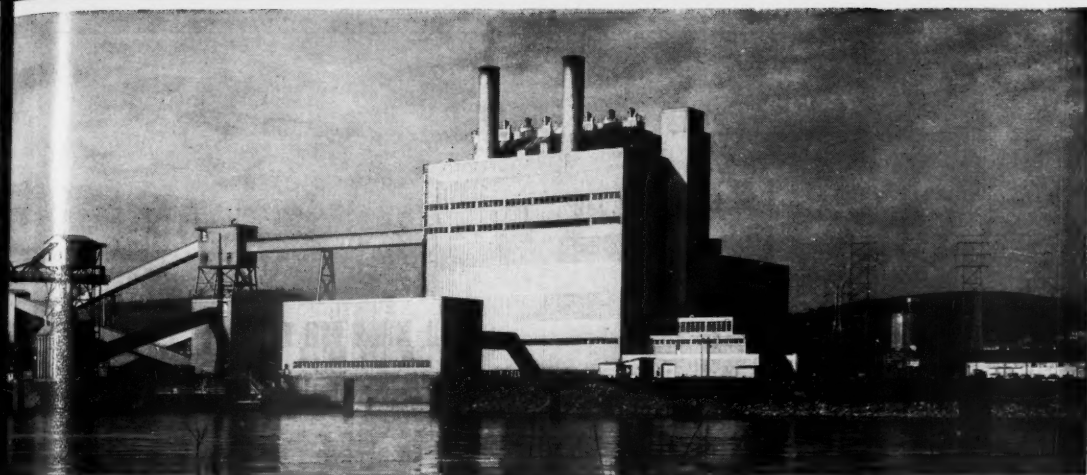
**DODGE** *Power Giants*

Builder  
have sp  
reasons  
bustible  
to keep  
light in  
foundat  
superior  
install  
wall ha  
using C  
write fo

H  
2424 F

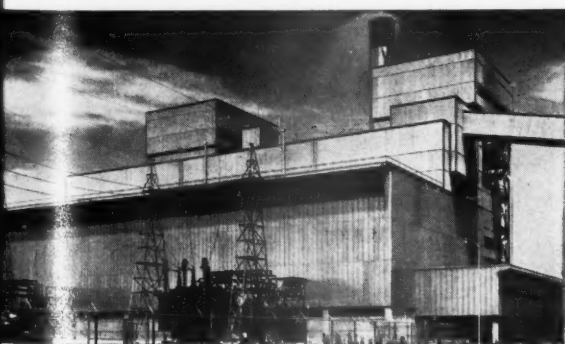
1958—PU



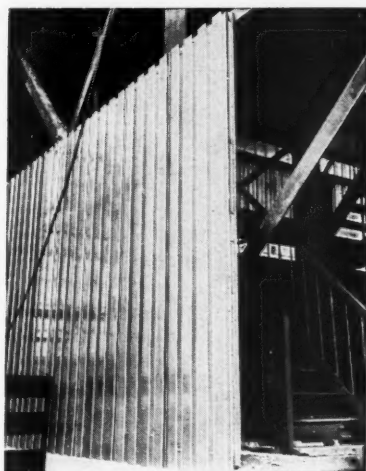


## Why fine new power plants everywhere have Q-Panel Walls

Builders of new power plants in all parts of the country have specified Q-Panel walls for the following very good reasons: 1. Q-Panels are permanent, dry and noncombustible, yet may be demounted and re-erected elsewhere to keep pace with expansion programs. 2. Q-Panels are light in weight, thus reducing the cost of framing and foundations. 3. Q-Panels have high insulation value . . . superior to a 12" masonry wall. 4. Q-Panels are quickly installed because they are hung, not piled up. An acre of wall has been hung in 3 days. For more good reasons for using Q-Panel construction, use the coupon below and write for literature.



Q-Panel walls grace the new Elrama Power Plant (above) near Pittsburgh. It was designed by Duquesne Light Company's Engineering and Construction Department. The Dravo Corporation was General Contractor.



Q-Panel walls (above) go up quickly in any weather because they are dry and hung in place, not piled up.

More than 32,000 sq. ft. of Q-Panels were used to enclose the impressive Hawthorn Steam Electric Station (left) of the Kansas City, Missouri, Power and Light Company. Ebasco Services, Inc., designed and built the plant.



Please send a free copy of your Q-Panel Catalog.

NAME \_\_\_\_\_

FIRM \_\_\_\_\_

ADDRESS \_\_\_\_\_

PUF1

# Robertson Q-Panels

## H. H. Robertson Company

2424 FARMERS BANK BLDG. • PITTSBURGH 22, PA.

Offices in Principal Cities

1958—PUBLIC UTILITIES FORTNIGHTLY

# Twofold Benefits From The **Analysts Journal**

1. Its timely articles by the nations leading security analysts and economists keep you informed as to methods and trends in the security markets. You will be better able to present your company in its most favorable light if you know the trend of financial thinking as expressed in the official publication of the Security Analysts.
2. Its advertising pages provide a means of putting your story across to the Analysts. There is no more direct and effective way to contact this influential group of investment specialists than to advertise in their own quarterly Journal.

*To Keep Abreast of Investment Markets*

**READ THE ANALYSTS JOURNAL**



*To Keep Investment Markets Abreast of Your Company*

**ADVERTISE IN THE ANALYSTS JOURNAL**

PUBLISHED FIVE TIMES A YEAR BY THE NATIONAL FEDERATION OF FINANCIAL ANALYSTS SOCIETIES

**THE ANALYSTS JOURNAL**  
444 Madison Avenue, Room 2004  
New York 22, N. Y.

*Gentlemen:*

- ☐ Please enter my subscription for one year at the subscription rate of \$5.00—United States; \$5.50—Canada.
- ☐ Please send me your advertising brochure.

Name .....

Address .....



.....

.....

# UTILITIES

## *A.l.m.a.n.a.c.k*

### JULY - AUGUST

<b>Thursday—31</b> <i>Illuminating Engineering Society will hold national technical conference, Toronto, Ontario, Canada. Aug. 17-22. Advance notice.</i>	<b>AUGUST</b> <b>Friday—1</b> <i>Oklahoma Broadcasters Association begins meeting, Lake Texhoma, Okla.</i>	<b>Saturday—2</b> <i>American Institute of Electrical Engineers will hold Pacific general meeting, Sacramento, Cal. Aug. 19-22. Advance notice.</i>	<b>Sunday—3</b> <i>Western Electronic Show and Convention will be held, Los Angeles, Cal. Aug. 19-22. Advance notice.</i>
<b>Monday—4</b> <i>Southeastern Electric Exchange Public Utility Executive Course begins, Atlanta, Ga.</i>	<b>Tuesday—5</b> <i>Appalachian Gas Measurement Short Course will be held, Morgantown, W. Va. Aug. 25-27. Advance notice.</i>	<b>Wednesday—6</b> <i>American Institute of Electrical Engineers begins special technical conference on nonlinear magnetics and magnetic amplifiers, Los Angeles, Cal.</i>	<b>Thursday—7</b> <i>Associated Police Communication Officers, Inc., ends 4-day annual conference, Baltimore, Md.</i> 
<b>Friday—8</b> <i>American Bar Association will hold annual meeting, Los Angeles, Cal. Aug. 25-29. Advance notice.</i>	<b>Saturday—9</b> <i>International Conference on Peaceful Uses of Atomic Energy will be held, Geneva, Switzerland. Sept. 1-13. Advance notice.</i>	<b>Sunday—10</b> <i>Pacific Coast Gas Association will hold annual convention, Portland, Ore. Sept. 3-5. Advance notice.</i>	<b>Monday—11</b> <i>World Power Conference, Canadian Section, will be held, Montreal, Quebec, Canada. Sept. 7-11. Advance notice.</i>
<b>Tuesday—12</b> <i>New Jersey Gas Association will hold annual meeting, Spring Lake, N. J. Sept. 5. Advance notice.</i>	<b>Wednesday—13</b> <i>Institute of Radio Engineers begins conference on electronic standards and measurements, Boulder, Colo.</i>	<b>Thursday—14</b> <i>Michigan Independent Telephone Association will hold annual convention, Grand Rapids, Mich. Sept. 9-11. Advance notice.</i>	<b>Friday—15</b> <i>Independent Natural Gas Association of America will hold annual meeting, New Orleans, La. Sept. 14-16. Advance notice.</i> 



### New Hydroelectric Giant

*A battery of powerful mercury vapor and incandescent flood lamps create an illusion of silvery water in this dramatic nighttime shot of the Portland General Electric Company's new \$25 million Pelton dam on the Deschutes river in central Oregon.*

Vo

F

issue  
offer  
evita  
mon  
an e  
relat  
crow  
a pe

\*P  
New  
with

# Public Utilities

## *FORTNIGHTLY*

VOL. 62, No. 3



JULY 31, 1958

## Wanted—A Program to Equalize The Flow of Recession

Too many utility offerings in the same market create not only a traffic jam but can actually hurt the offering companies to the extent that competition for investment results in economic pressure.

By WILLARD F. STANLEY\*

FOR many years it has been apparent that a high degree of co-operation is needed among utilities planning new issues of securities in order to time these offerings properly and thus avoid the inevitable penalty, in the form of higher money costs, which results from crowding an excessive number of offerings into a relatively short period. Often this overcrowding of offerings follows or precedes a period of dearth of new issues, so that

the effect is one of "feast or famine." To be most effective, this co-operation in the timing of security offerings should extend to prospective issues of industrial securities and also to offerings of governmental subdivisions.

There have been several occasions in recent years when temporary overcrowding of the offering schedules has raised the cost of money substantially for those issuers unfortunate enough to offer their securities within these periods of temporary excess. The principal sufferers have been issuers of new funded debt. New is-

\*President, Corporate Services, Inc., New York, New York. For additional personal note, see "Pages with the Editors."



## PUBLIC UTILITIES FORTNIGHTLY

issues of preferred and common stock have usually been spaced sufficiently far apart to avoid a serious penalty in money costs.

Many among the financial fraternity have long been aware of this problem and efforts have been made to limit offerings to a normal flow, principally by disseminating information as to forthcoming issues.

The *Investment Dealers Digest* carries, in each weekly issue, a moving schedule with respect to forthcoming new issues of all types of securities of private corporations, including funded debt, preferred stock, and common stock.

THE Irving Trust Company, through its utilities department, headed by Vice President John Childs, goes considerably further, in the utility field, by distributing tabulations of forthcoming utility security issues planned for marketing within the ensuing twelve months. However, it is seldom possible to get accurate information about prospective offerings more than two to three months in advance, as utilities are usually not in a position to announce issues far in advance of their offering. First, it is difficult to fix timing of issues far ahead, and, second, company managements naturally wish to avoid having to publicly change their financial plans, as this may be taken by the uninitiated as indicating financial problems or financial difficulties.

The Irving Trust organization has endeavored to help the utility industry in solving the problem of crowded competitive bidding conditions on new security issues by circulating information as to proposed dates for competitive bidding, designed to prevent several issues from being offered for bidding on the same day

or during any other short period. Information distributed by this bank has also been designed to attain a proper spacing of so-called "due diligence" meetings, at which representatives of the underwriting syndicate planning to distribute or bid for the forthcoming offering, may meet company officials and underwriting managers and discuss the proposed prospectus for the issue and obtain answers to questions regarding the company's affairs.

HOWEVER, it is all too evident that efforts to date, desirable and helpful as they have been, have not fully solved the basic problem nor prevented substantial loss in higher money costs to many utility issuers. This has been forcibly demonstrated only recently by the movements in the bond market during the period from February 20 to March 6, 1958.

This period, comprising only eleven business days, witnessed the offering of an almost unprecedented number of new utility funded debt issues. Fourteen such offerings were made in this short period, aggregating around \$325 million.

As a result of this overcrowding, underwriters became alarmed as to their ability to distribute forthcoming issues at then current market levels and accordingly dropped their bids drastically on subsequent new issues. This condition increased progressively as the bids rose higher and the flow of offerings continued. Even at the higher yields, a number of underwriting syndicates were compelled to dissolve while large blocks of the issue were still undistributed, with the natural result that these securities sold at depressed prices. This, in turn, tended to increase yields on the still later issues. This piling of Ossa

## WANTED—A PROGRAM TO EQUALIZE THE FLOW OF RECESSION

on Pelion went on until, finally, the temporary excess of offerings ended about March 6th.

TOWARD the end of January, 1958, an issue of double "A"-rated electric utility bonds was offered at a 3.60 per cent yield basis. This level continued relatively unchanged well into February, and was not greatly different at February 20th, when the flood of new issues started to strike the market. Over the next two weeks the yields mounted rapidly as more and more issues were offered and as the underwriters' shelves became loaded with new undigested securities. The debacle culminated with a 4.22 per cent yield basis for an offering of double "A"-rated bonds of an electric utility at March 6th. After this, offerings dwindled and the market began to absorb the overload gradually and build back toward a more normal basis.

Thus, in a few weeks' time, yields for bonds of the above-mentioned rating increased over 0.60 per cent per annum due to crowding an excess of offerings into too short a space of time. After this pressure was lifted, conditions in the bond market improved, as security inventories were reduced, and by April 23rd a double "A"-rated electric utility bond issue was successfully distributed on a 3.75 per cent

yield basis, evidencing reversal of the greater part of the upturn in yields which had resulted from the crowded offering calendar of late February and early March. It is significant, however, that full recovery to the late January level had not even then been accomplished, despite the fact that in this intervening period the bond market had received the benefit of several steps taken by the Federal Reserve Board to ease credit, both by reducing rediscount rates and liberalizing reserve requirements for member banks.

WHAT brought about the overcrowding in this short period and the scarcity of offerings that preceded it? Were these developments largely inevitable or were they avoidable? What did it cost the electric utility industry—in particular those companies which had the misfortune to make offerings during this limited period when the market was overwhelmed by new securities?

The plethora of offerings between February 20th and March 6th may well have been due principally to the relatively meager offering schedules during the period of several weeks preceding the former date. How and why did this scarcity occur? A contributing factor was probably the desire of issuing utilities to



**Q** "For many years it has been apparent that a high degree of co-operation is needed among utilities planning new issues of securities in order to time these offerings properly and thus avoid the inevitable penalty, in the form of higher money costs, which results from crowding an excessive number of offerings into a relatively short period. Often this overcrowding of offerings follows or precedes a period of dearth of new issues, so that the effect is one of 'feast or famine.'"

## PUBLIC UTILITIES FORTNIGHTLY

avoid competition (in time) with, and to await the outcome of, a three-quarter *billion* dollar American Telephone and Telegraph Company debenture issue scheduled for offering in early February. This issue, however, was convertible into common stock, and, therefore, was somewhat in the nature of an equity security with which electric utility bonds were not seriously competitive. Holding back of offerings on this account seems to have been unnecessary and ill-advised.

Another contributing factor may well have been the desire to defer public offerings until audited figures for the calendar year 1957 could be used in the offering prospectus, thus avoiding the time and expense incident to having a special audit made by independent accountants or, in lieu thereof, a special check made by them of the company's figures for an unaudited period. If investigation of the offering schedules in the ensuing month indicated that a serious "feast or famine" situation might be brewing, deferral of offerings for this cause would seem to have been highly "penny-wise and pound-foolish." The additional audit expense would be infinitesimal compared with the possibility of having to pay considerably higher rates for the new money.

**I**T is impossible to put an accurate figure on the amount of loss suffered by the electric utility industry because of this recent situation of overcrowded bond offerings. But a reasonable "guestimate" is not out of the question. Undoubtedly, the drastic yield increase from the overcrowded bond market carried over at least partially into the weeks following the ending of the period of overcrowding and affected adversely the yields received

by issuers on new issues offered in this subsequent period.

During this later period the market gradually righted itself and yields on new issues were considerably reduced. Just how much was lost as to these later issues and when this loss began to completely disappear in reference to subsequent offerings, is extremely difficult to judge. So it seems more conservative to limit the estimated loss to a minimum by excluding any loss related to such subsequent issues and confine the loss to those issues offered during the actual period of overcrowding. The increase in yields over these two weeks, while gradual, was apparently greater as the end of the period of overcrowding was reached. This was natural, as subsequent issues had to absorb the cumulative effect of the adverse yield trends which preceded their marketing.

**I**F we assume double "A"-rated bonds as representing a fair average of the difference in yields on all ratings of electric utility bonds (since these lie midway in quality and yields between the single "A" and triple "A" categories), we find a maximum increase in yields of about 0.62 per cent per annum applicable to bonds of this category, apparently attributable to the overcrowding. If this increase in yield were applied on the basis of average upward gradation during this two weeks' period, applied to average amounts of funded debt offered on the various business days within this period, a 0.31 per cent per annum average increase in yield would be indicated on all issues marketed during such period.

However, there was, naturally, a considerable variation in amounts offered as



### Co-ordinating Security Offerings

**“T**HE management of the utility industry comprises executives with sufficient energy and ingenuity to work out an effective, legal, and proper method of avoiding this unnecessary loss because of artificially increased costs of funded debt. Perhaps the desired result could best be accomplished through the industry associations; i.e., Edison Electric Institute, American Gas Association, etc. By augmenting their staffs if necessary, they would be in a position to contact member companies whenever forthcoming issue schedules indicated unsafe overcrowding, in terms of days, weeks, or months.”

---

between different segments of this period; also the impact appears to have been greater toward the end thereof. An overall estimate of an average loss of 0.25 per cent per annum might, therefore, be considered highly conservative as applied to the total amount of utility funded debt offered in the period.

**A**PPLYING this assumed average increased cost of money to the aggregate amount of offerings above mentioned—i.e., \$325 million—we find an indicated annual loss in higher interest to the issuing companies aggregating about \$800,000. Assuming half of this amount will be recovered in reduced federal income taxes, a \$400,000 annual increase in the “after-tax” cost of the funds would

follow. With an assumed average sinking fund of 1 per cent, the effective maturity of 30-year electric utility first mortgage bonds (which formed the bulk of these offerings) would be about twenty-five years.

If this latter figure were multiplied by the \$400,000 annual “after-tax” increase in interest, the net “after-tax” loss to the issuing companies, over the normally expected lives of the bonds, would amount to a total of about \$10 million. This seems a high price to pay for a situation which should be curable, or at least largely mitigable, by a certain amount of additional co-operation between electric utilities which are prospective security issuers, both among themselves and with other issuers, in an endeavor to attain proper

## PUBLIC UTILITIES FORTNIGHTLY

timing for the respective offerings of their securities.

**R**ELATING the loss to one of the 14 utilities having the misfortune to issue its bonds during the period of overcrowding, we find that the average issue during such period was something like \$23 million. On an issue of that size, the assumed average increase in interest yield of one-quarter per cent per annum (or half that percentage after reflecting the tax saving) would approximate \$30,000 per annum. With an assumed life of twenty-five years, total loss to the issuing company would run to nearly \$750,000.

It seems probable that the greater part of this loss, both to the industry as a whole, and to individual companies, could have been eliminated or greatly reduced by changing the timing of the proposed issue, after learning, in advance, of the dangerous overcrowding which was impending, as shown by the available offering schedules. This could have been accomplished by moving the offering of a specific issue backward or forward, usually for not more than thirty days, and certainly not exceeding sixty.

**N**ORMALLY, utilities issuing bonds to raise funds for construction plan to use the proceeds to pay accumulated bank loans which have been used to finance construction already done, or to pay for construction to be done in the future. If the issue were moved forward for earlier offering, the bank loans would be paid that much sooner, in which case construction for the period of such acceleration would be financed by the bond proceeds instead of by bank loans.

If the cost of the bond money exceed-

ed the interest rate on the bank loans, as it usually does (although not at present), there would be a loss in interest to the issuer of this difference for the accelerated period. If a  $1\frac{1}{2}$  per cent differential in interest is assumed as reasonable over a long-range period, this difference, applied to an assumed \$7.5 million of construction for a maximum period of sixty days—or \$3.75 million of construction expenditures per month—would make the loss to the issuer, after allowing for federal income taxes, less than \$10,000 as to the utility used in the example above. This compares with a total loss over the life of the bonds of \$750,000 as assumed above on such issue if it were not accelerated or deferred but offered during a period of intense overcrowding. This would reflect the assumed average loss per issuer from the conditions that existed in late February to early March of this year. A similar benefit to the issuing company could be assumed if the same typical issue were deferred instead of being accelerated. The profit or loss would in most instances be substantially less than the foregoing assumption because the funds would be borrowed only as needed throughout the maximum 60-day period, so that the interest differential would apply to a portion of that period only.

**W**HAT can and should be done to flatten out these peaks and valleys in the number and quantity of bond offerings by utilities and other security issuers? Obviously, something more than has been done, for procedures adopted up to now have been ineffective to prevent the grossly excessive bond schedules of late February and early March. There seems



## WANTED—A PROGRAM TO EQUALIZE THE FLOW OF RECESSION

to be no lack of readily available information for utility issuers as to the amounts and dates of forthcoming funded debt offerings. But despite dissemination of this information, nothing sufficiently effective was done in this recent instance toward rescheduling the issues to level out the offerings to a normal basis. Instead there was crowded into a very short period an amount and number of issues that could be successfully marketed only in a much longer period; in fact, issues normally distributed over two months were compressed into two weeks.

The essential factor of effective co-operation between issuers still remains lacking. It may be argued that nothing prevented or now prevents individual issuers from adjusting their offering schedules after receiving information indicating a forthcoming excess of offerings in a short period. It may also be suggested that nothing has prevented communication between issuers, designed to develop adjustments of offering dates whereby there would be acceleration or deferral of the offerings, as seemed best to the respective issuers, by those issuers in the best financial position to do so with a minimum of expense and inconvenience. The fact remains that something has failed to click and that on several occasions in recent years excessively over-

crowded schedules have occurred and have resulted in substantial loss to a considerable number of utility issuers, and, hence, to the industry.

THE management of the utility industry comprises executives with sufficient energy and ingenuity to work out an effective, legal, and proper method of avoiding this unnecessary loss because of artificially increased costs of funded debt. Perhaps the desired result could best be accomplished through the industry associations; *i.e.*, Edison Electric Institute, American Gas Association, etc. By augmenting their staffs if necessary, they would be in a position to contact member companies whenever forthcoming issue schedules indicated unsafe overcrowding, in terms of days, weeks, or months. This would be in the nature of a service rendered to the member companies and paid for by them through application of a portion of their regular dues.

Discussions of industry association representatives with individual utility managements, looking to schedule adjustments, would not be resented, as efforts of individual companies to solve the problem by contacting others might be. If such a general plan were adopted, it would not only be the privilege, but the duty, of the industry associations to seek the al-

“It is impossible to put an accurate figure on the amount of loss suffered by the electric utility industry because of this recent situation of overcrowded bond offerings. But a reasonable ‘guestimate’ is not out of the question. Undoubtedly, the drastic yield increase from the overcrowded bond market carried over at least partially into the weeks following the ending of the period of overcrowding and affected adversely the yields received by issuers on new issues offered in this subsequent period.”

## PUBLIC UTILITIES FORTNIGHTLY

leviation of the situation by co-operative rescheduling, to the extent necessary.

As indicated near the beginning of this article, there seems to be no reason why the efforts to obtain such co-operation should be limited to utilities. Where industrial or commercial issues, or even those of governmental subdivisions, appeared likely to clog the normal channels of funded debt distribution, it should be feasible for the utility industry association to contact either the associations representing the other industries affected, or the individual industrial corporations or municipalities or other governmental authorities with a view to adjusting the excessive offering schedule.

The cost of maintaining such a service on the part of the industry associations and any additional payments which might be required from member companies should be negligible in relation to the tremendous amounts which should be saved by effective co-operation. Granted that only the particular utilities issuing their securities during the periods of excess offerings would have their costs of money adversely affected thereby, there is no assurance this loss would not be suffered by any utility which frequently goes to the security markets to raise funds for expansion. By the law of averages it is reasonable to assume that if a given company was not involved in the overcrowded period on one occasion, it could well be on another. It would have to be extremely lucky to go through a period of say ten years without having any of its financing fall into one of the perhaps

seven or eight such adverse periods which might be expected to occur within that time.

REVERTING to the above estimate of average loss from the recent bond debacle—i.e., \$750,000 after taxes for a \$23 million issue—it will readily be observed that avoidance of such a loss would justify very considerable expenditures on the part of the issuer. Even if such a loss occurred as to a single company only once every five or ten years, the average annual cost would run from \$75,000 to \$150,000, and even though a smaller amount of bonds was involved (say as low as \$5 million), the total loss from marketing in a period of excess offerings would average over \$150,000. If this loss were sustained only once in ten years it would cost even this small issuer a minimum of \$15,000 for each year of the ten-year period.

It is quite possible that the industry associations would find it feasible to undertake this work without increasing charges to member companies. But even if a moderate special charge should prove necessary to carry out the program efficiently, it should prove well worth the while of every utility to contribute its share and thus obtain effective insurance, at negligible cost, against danger of a very substantial loss. Under present conditions, it is reasonable to expect that a utility would be likely to suffer such a loss within any considerable number of years so long as its expansion program continued at or near the rate presently normal for the industry.



## Job Balance—A Fresh Angle in Utility Relations

*Recession and unemployment have created a keen popular interest in the way communities are put together. Some are hard hit, others better off. Better balance in industries seems to be a definite factor. Utilities constantly build for community and load balance, have things to say to this new relations audience.*

By JAMES H. COLLINS\*

**B**ESIDES a good five-cent cigar, what this country needs is a comic book about its town rivalries, from the Colonial aspirations of Philadelphia and New York, right down to the Podunks and Smith Corners, swelling like the frogs in the Aesop fable, each vowing to be bigger or bust.

Philadelphia and New York once aspired to be biggest in population, trade, political importance. Industries and jobs were not regarded as so important then. Philadelphia was biggest for a time, and promised to become the capital of our country. Then the fight ended in a draw,

\* Professional writer, resident in Washington, D. C. For additional personal note, see "Pages with the Editors."

when they both had more business than they could take care of.

Minneapolis and St. Paul, Chicago and New York, Savannah and Atlanta.

Prime material for such a book would be the two cities that, in a wonderland of opportunities, got along with each other like a couple of strange bulldogs—San Francisco and Los Angeles. They fought for population, industries, tourists, railroads—one of the hottest battles was fought when the southern city aspired to become a seaport.

**O**NE good story for the book, not so often heard amid their population and business rivalries, is about their social aspirations.

## PUBLIC UTILITIES FORTNIGHTLY

San Francisco has always regarded itself as cosmopolitan—instance, the Bay fellow who went on a tour of the United States, and came back saying he had visited twenty-three cities and two country towns. "What were the country towns?" he was asked, and replied, "New York and Chicago." Los Angeles in comparison has been the collection of villages in search of a city.

Well, the San Francisco nobs gave a party for the Los Angeles people, and the latter, in appreciation, gave a party for the San Franciscans—and nobody came.

This particular rivalry, as often happens, died down when the second World War brought such an overflow of population and industry to both towns that they forgot to fight, were too busy taking care of growth. Residents of each city have been shifted back and forth in jobs; branch plants of each town's industries have been located in the other. There is no longer any big bone to fight over.

Occasionally there is an echo of the old warlike days, as recently, when a party of San Francisco Rotarians were being chugged around Los Angeles harbor. In contrast to the splendid natural harbor around which the northern city is built, one of the greatest in the world, the visitors saw port facilities dredged out of cauliflower fields, and annexed to the city, for ocean rate advantages, by a 20-mile strip of real estate.

"Will it be all right to throw this cigarette overboard?" asked one of the northern visitors, solicitously. "It won't set fire to the sagebrush in the harbor?"

**A** MERICAN towns will fight for position and prestige, because they are siz-

zling with energy, and have chips on their shoulders.

Utility companies are drawn into town battles, and have been participants in their growth.

Utility companies have an interest in community growth that is not civic pride, but strictly for the pocketbook—they build for customers. If their search for additional industries, and trade, were better known, they would stand higher with the citizenry. More important, the people who find jobs in the newly attracted factory, who sell groceries to the jobholders, practice professions, operate theaters—everybody right down to the housewife and her budget—would have a better understanding of the ways in which a good town to live in, and work in, is put together, and where a booming town that swells up without balance is not so good in hard times.

**C** HAMBERS of commerce are admired, supported, and wisecracked about, because they are recognized for their community construction. If the power or gas or telephone company were even wisecracked for its home-town boosting, that might be a very good relations stance.

Suddenly, with the business letdown that everybody hesitates to give a name, but which is truly the old-fashioned "hard times" of our granddaddies, there is a new kind of community interest. The careless race for growth has turned into an interest in how towns are put together, why in *our* town there is so much unemployment, and no place for certain skills to look for other jobs, while other towns seem to be not so badly hit, laid-off workers finding billets in other industries; not

## JOB BALANCE—A FRESH ANGLE IN UTILITY RELATIONS

so well-paid, perhaps, but jobs, with pay checks, that enable families to bend, not break, in the storm.

**T**HERE is a new climate in utility relations, comparable to that brought in by the Russian sputniks. As our national confidence was jarred by the fact that another nation had such technical ability, so the recession has jarred community confidence. People want to know where we stand in technical education, want to know whether the Russians are very far ahead—they want a score. And their confidence in the places where they live has been shaken. They want to know what went wrong, who did what, who is to blame—they want a scapegoat.

In this mystery, as in the paperbacks, there are numerous suspects—the party in power is No. 1, with government spending, import trade, the banking system, the unions, price supports. And, as happens in the paperbacks, the suspect that appears to be most obvious never is the real murderer. In the recession mystery, nobody has turned up enough evidence to swear out a warrant.

The economists are in wide disagreement. It looks very much as though this trouble comes and goes, like the "hard times" of old. The economic body, like the human body, has its unpredictable ailments. Whether, economically, we ate

something, or caught a virus, we do not yet know. The experts are looking for a virus, or a cycle.

Everybody is interested. Utility relations work is generally shaped for different audiences. The customers are concerned by some aspects of the company and its service; employees have a different angle; the stockholders, the schools, the housewives, the voters, are all special groups. What is right or wrong with our town employmentwise is a matter for all groups, even stockholders who live at a distance—it may affect their dividends and shares. This is an audience that did not exist two years ago, and should have a strong attraction for utility relations folks.

**P**ICTURE an industrial region like the Long Island aircraft complex, born out of war. For almost a generation it has been thriving, seeking workers, hiring and training young people, women as well as men, many back from military service. Jobs! Who ever has to worry about a job? You take the best among those offered, and if you do not like it, you can always go out and find another.

More employees stick, study engineering and other subjects for promotion, get married, sign up for homes in new housing developments, take on debts for furniture, appliances, cars, bring up children,



**Q** "THERE is a new climate in utility relations, comparable to that brought in by the Russian sputniks. As our national confidence was jarred by the fact that another nation had such technical ability, so the recession has jarred community confidence. People want to know where we stand in technical education, want to know whether the Russians are very far ahead—they want a score."



## PUBLIC UTILITIES FORTNIGHTLY

participate in community activities. All in full confidence that the companies will take care of them, full reliance in the pay check. True, they have some childhood memories of the great depression, when a load of lumber or cement going along the street was as rare as a herd of elephants. Pop did not actually have to sell apples downtown, but Uncle George did, until he could get onto WPA. Pop managed to get hold of some kind of job, but sometimes, commenting on the way the young people spend everything nowadays, he says he hopes they will never have to go through a depression as he did, plowing a furrow with his nose.

"Oh, such times will never come again!" the youngsters assure him. "Look at the built-in safeguards—unemployment insurance, social security, the Federal Reserve System. Why, the government has big projects waiting for any emergency. The politicians would be in competition with one another to take care of the unemployed. This is a new day and age, Pop."

**T**HEN, like a bolt out of the blue, people are laid off in communities that grew on special industries. Everybody working at the same type of job, no other work of the same kind anywhere around, no other work at all in the region that yesterday was so prosperous. There is Brooklyn, and New York, and the metropolitan area, but so far away, and so different in their jobs.

Detroit is being made to stand as the horrible example of a town built without counterweights. Rightly or wrongly, it and the automobile industry are the whipping boys. But, many little Detroites are

being disclosed as the economy slackens.

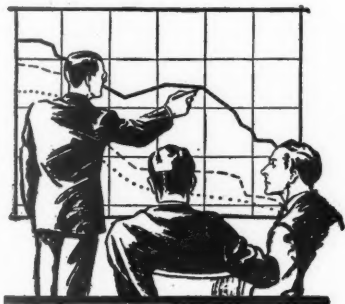
**P**EOPLE studying their own towns, comparing them with others not so hard hit, are learning a lot about diversification of industry. Business as a whole is like the curate's egg, good in spots. There are 5 million out of work, but 60 million working. What are they working at? What kind of new industry does our town need to get through such a time?

While no business is depressionproof, many are resistant. In bad times, people will eat, drink, smoke, spend money on entertainment, hobbies, sports, touring, foreign travel, comfort, even dissipations. Hotels and restaurants lose patronage, but food markets report increased sales. People eat out of tin cans, drink out of paper cups, such lines are often doing well, and a town with factories producing them, even jobbers distributing them, have cushions to ease joblessness.

Not all the built-in safeguards against recession are governmental, or political. Some very effective ones have arisen in business, as a result of growth, and more are steadily appearing.

For example, in the dreary 1930's a swimming pool was an idiocy of Hollywood, reputedly gold plated. A Hollywood engineer named Paddock built them for the picture stars, and saw that they were far from idiotic. Stripped of movie glamour, a swimming pool in the backyard was a real addition to family life—a great thing for the kids, and a brand-new form of prestige. There is always a good market for prestige in this country, and Paddock got the notion that pools could be sold to many American families.

He was right. He found enough cus-



### Lessons in Diversification

**“P**EOPLE studying their own towns, comparing them with others not so hard hit, are learning a lot about diversification of industry. Business as a whole is like the curate's egg, good in spots. There are 5 million out of work, but 60 million working. What are they working at? What kind of new industry does our town need to get through such a time? While no business is depression proof, many are resistant.”

---

tomers to make pools his business. Today, it is reported, several hundred concerns are building pools over the land. Home building and general construction are lagging. Swimming pool contractors employ some of the building workers out of jobs.

Factories are making patented pools of metal and plastic, some that sit on the ground, instead of in an excavation, sell for only a couple of hundred dollars. Other factory types are designed for assembly by the purchaser, or let him save costs by doing part of the construction.

**T**HE automobile dealer who has been wondering why some of his regular customers have not been in to trade for a 1958 model may hear that they are not buying imported carlets, are not mad at Detroit, not hard up—just that this sea-

son they have signed up for a swimming pool instead. Or it may be a motorboat, which has also become an accessory of family life; they were on a very modest basis in the 1930's, but have now been improved, made less expensive, and promoted by a new industry.

Sporting paraphernalia of all kinds are thriving. So is hi-fi, sets and records, and do-it-yourself music—the average American youngster, like the average German for generations, now doubles in brass.

Some of these lines have opened up opportunities for small concerns—local enterprises, employing not so many people individually, but adding up a large total, and with steadiness in their jobs. These small enterprises often grow, and others get into the business on a modest scale—the traditional shoestring—and

## PUBLIC UTILITIES FORTNIGHTLY

their payrolls, purchases of materials and equipment, and consumption of power, gas, use of communications, and so on, help keep the town on an even keel. Pioneering the swimming pool was at first local, and modest. It was something new for which a market waited to be developed. It has grown into big business, with many local contractors and manufacturers, but is not yet Big Business—there is no General Swimming Pools, Inc.

Also, in the high-fidelity industry, while there are large companies making instruments and records, there are small concerns making specialties. One record company, now among the majors, was started during the war shortage of shellac, and sent canvassers from door to door buying up old discs for the shellac.

UNTIL 1957, town people were not much concerned with community building. Utility people often had interesting information about it, but their chief audience was limited to employee magazines.

Unemployment has made this subject live news. What the average citizen knows about the way his town grows is elemental. What a utility company can supply is technical information about the process, to show him what there is in it for him.

"I guess the chamber of commerce gets new factories by advertising for them," he speculates. "They blow about our climate, our skilled labor, our raw materials. Natural gas is important to some factories, and now we are on a big pipeline. Manufacturers in other places where things are crowded, and real estate is high, write to the chamber, and get more

details, and the first thing you know we have a new factory here, hiring people. I think the railroads advertise, too—we have good transportation."

Which is a simple account of the way he thinks his town is put together, based on his information. Now that recession has disclosed something the matter with his town, or towns harder hit, he is interested in more information.

First, community promotion is a long-range proposition. How nice it would be if business concerns clipped the coupon in chamber of commerce advertising, and forthwith moved. But actually, from the time the advertising gets a nibble, and until the new factory opens up, there is a long lag—often years.

NIBBLES from advertising are not enough to build up a good file of prospects, are only starters anyway. The majority of names in such a file are reported by businessmen attending conventions, talking with other businessmen on trips, and by diligent reading of business news about company changes, new executives, new processes. Where there is change, things will be moving. There are private-eye angles to the work, worming out isolated facts, fitting them together in patterns.

A typical pattern is that of the third-generation company, tightly packed in the town where the grandfathers started, still a family business, dominated by the aging grandsons who have hired a young, technically educated vice president to ease the burden of management. He advises moving out of that old location, or spreading production around a couple of branch plants, to get nearer new markets, enjoy

## JOB BALANCE—A FRESH ANGLE IN UTILITY RELATIONS

lower transportation costs and overhead. The old boys oppose this. News of the death of an executive, of the sale of family stock, of an economical new process, of an aggressive competitor—of change in many forms—makes that prospect active. The chamber of commerce fellows in the community promotion department may have been readying the young vice president against this day.

There is a good deal of diplomacy in town promotion—very definitely striped pants.

THERE is hot competition in town promotion nowadays among our own cities, towns, and regions, and even foreign countries. The South, the West, the Corn Belt, Texas, the old industrial centers of the East where American industry started are all rivals in promotion. A new industry may be won on a single advantage, lost on a disadvantage—promotion is not a job for anybody with ulcers.

Sales resistance is necessary in dealing with concerns that need money and make financing a condition of relocating. That kind of concern may be sound, have excellent future prospects, but cannot borrow in banking or investment circles. The town will be asked to raise capital, build a factory structure, give relief for a period in taxes, and things will work out well.

But there are industrial gold bricks being peddled around, too, better left to towns less experienced in promotion. The difference between sound and unsound concerns shows up later, in bankruptcy and unemployment. The citizen ought to be told about this phase of the work, through a little looking back in the history of his own town—or preferably some other town.

THIS kind of relations work raises the question of credits for results. Who did what to bring in a particular factory? The civic organizations, the utility companies, the railroads, the city administration? Is the credit to be divided up, each agency getting a pat on the shoulder?

The case history offers an impartial medium here, a recital of how it all happened, with the different agencies doing research and teamwork, as is the way it was handled. The town has a new industry, employing several hundred workers. It was attracted over a period of seven years, at times hanging in the balance, likely to go elsewhere. The promotion work was shared between agencies, one organization marshaling one kind of information, the utilities presenting engineering data on power, fuel, communications. The case history is not only impartial, but also readable by its objectivity.

“UNTIL 1957, town people were not much concerned with community building. Utility people often had interesting information about it, but their chief audience was limited to employee magazines. Unemployment has made this subject live news. What the average citizen knows about the way his town grows is elemental. What a utility company can supply is technical information about the process, to show him what there is in it for him.”

## PUBLIC UTILITIES FORTNIGHTLY

A representative town growth story is that of the paper cup factory, in Riverside, California, recently in the business news.

This town of 80,000 people is an agricultural center, where oranges have been grown for several generations. Its employment has been seasonal, and affected by fluctuations in crops and prices. Like practically all of southern California, it had more people than jobs up to Pearl Harbor, and little prospect of securing such an industrial plant then, because there was not enough soil in which it could root.

This plant supplements others in the East, South, Middle West, and Canada, where population and industry have provided markets. One reason for locating on the Pacific coast was that it had gained 10 million population postwar, and is expected to gain 18 million more in the next seventeen years. So there was an adequate market.

Then, the Los Angeles area has been active in building supermarkets, and outlying shopping centers, which merchandise foods and beverages in paper cups and containers—cottage cheese, sour milk for salads, orange and other juices served in paper cups. The coffee break alone, definitely a postwar institution, set up a large new steady demand for paper cups. This company has a special item, plastic lined, not affecting coffee flavor.

**C**oin machine merchandising of foods and beverages is another trend favoring paper containers, as are the mass feeding of workers in factories and offices, and the informal living, motoring, and travel of present-day people. The paper

cup plant makes 600 different kinds of paper containers, ranging from half-ounce cups to 10-pound tubs. In 1929 the Lily-Tulip Cup Corporation did a \$4.4 million business; today that is more than \$85 million.

More than sixty communities were surveyed in the decision locating this plant. Town people have a keen interest in the advantages and disadvantages that were weighed; they indicate attractions for other industries.

Townpeople have an interest in the jobs created by such a business—how many, what kind, whether skilled, semi-skilled, unskilled—not only from the standpoint of today's job hunter, but for the youngsters in school, shaping their education for jobs and advancement in their own community. This plant started with several hundred employees, planned adding more in the near future. The company employs 5,000 people nationally.

Interesting symbolically, 28 acres of orange grove were cleared for the site—paper cups are not likely to be affected by a freeze, a blight, a glut, or a crop failure.

Such an industry often creates employment in other lines—contracts for houses, public improvements, trade for merchants. It can also create markets for parts, materials, equipment, and attract other industry, as a steel mill brings metal-working plants around it.

These details might well be published by a utility company, along with its own load-building aspects, for the information of townspeople.

**R**UNNING accounts of a town's promotional activities, for the people who are going to find employment, and trade,





### Interurban Rivalry

**“T**HERE is hot competition in town promotion nowadays among our own cities, towns, and regions, and even foreign countries. The South, the West, the Corn Belt, Texas, the old industrial centers of the East where American industry started are all rivals in promotion. A new industry may be won on a single advantage, lost on a disadvantage—promotion is not a job for anybody with ulcers. Sales resistance is necessary in dealing with concerns that need money and make financing a condition of relocating.”

---

and increased security—this can be an excellent medium for teaching what business is all about.

Business is making definite efforts to be understood.

What the Russians believe about our capitalistic system is not quite as fantastic as what some of our own people believe business to be. Surveys among young people at school, who tomorrow will be seeking jobs, and careers in business, reveal discouraging ignorance. Business is regarded as a money-grubbing, cutthroat affair, poorly paid, dull, honeycombed with favoritism.

Of course, these youngsters are still in the age when adventure, poetry, kid glamour generally, still influence their thinking and aspirations. They do not really know how much interest there is in business, its opportunities, trends, and rewards. They ought to know more about it. The way their own town seeks development, the nature of its business, could educate them.

The town seeking balance in its payrolls may attract a chemical manufacturing concern, an excellent illustration of the complexity of modern business. A car assembly plant, a work clothes factory,

## PUBLIC UTILITIES FORTNIGHTLY

turn out tangible things. But chemicals are different. Much of the production goes to other chemical manufacturers, as raw materials, and a chemical company buys similar raw materials. No better instance could be found of business taking in its own washing.

**A**GES ago, diatoms laid vast beds of phosphate rock in Montana. With sulfuric acid it was turned into fertilizer, until chemical research found out how to make electric furnace phosphoric acid, which goes in tank cars, under water, being highly inflammable when dry, to a Pacific coast factory where it is converted into dry crystal phosphate materials. Not even the factory people see the acid, because it is burned in a sealed furnace. The end result is something used in every kitchen—household detergents.

A chemical plant is a valuable asset to any community, belonging to an industry now fourth largest in American manufacturing, growing 10 per cent yearly compared to 3 per cent for general manufacturing. Uncle Sam lists 72 different manufacturing groups; chemicals go into every one of them. So, it is a vigorous business, and town promoters wisely scout for it.

It is a business made up of 9,000 concerns, many small, getting into it every day—the largest is du Pont, with 8.5 per cent of the production. It is a business of keen competition, depending on research and sales activity to keep going, constantly developing new products with long technical names; it spends three cents of its sales dollar for research, compared to one or two cents in other lines, is rated the largest employer of scientific

and technical ability. And it is a business in which people like to work, for it has a low labor turnover, and a worker in a chemical plant can go along for over three million hours and not be hurt in an accident.

Chemical manufacturing is on the move. It used to be centered in the older industrial states, which are still active, but half of its growth in new facilities is south of Ohio—Texas leading, California next. Its employment stability is reflected in its investment per job—\$8,000 finances a steel job, \$9,000 an auto job, but a chemical job takes \$17,000.

**T**HE huge piles of rubber that were necessary after Pearl Harbor are still remembered—oil tires, doormats, garden hose, anything containing natural rubber, cut off by war. Today, an auto tire takes only 10 per cent natural rubber, the rest being synthetic styrene and butadiene, and the chemists are working to develop replacements for the natural rubber, which has special qualities.

Those are the petrochemists, who predict that by 1960 one-half of all the chemical production will be petrochemicals made from petroleum and natural gas. That is why Texas now leads in chemical manufacturing. Petrochemicals are innumerable raw materials for other industry, and familiar things synthesized, like alcohol and glycerin. The day will come, say the petrochemists, when we cannot afford to burn oil or natural gas—they will be needed for more valuable petrochemicals.

Has a town large deposits of salt? Guessing how much salt goes into manufacturing, how much used for food, is a

## JOB BALANCE—A FRESH ANGLE IN UTILITY RELATIONS

good game, food taking only 4 per cent. Manufacturing takes half the lime, much of the sulfur, the lion's share of other natural materials. Borax yesterday was a kitchen helper; today it is a rocket fuel.

Another kind of industry, as yet not widely understood, but good ballast for payrolls, is metal working in the countless forms developing from aircraft, rockets, missiles, and automation.

**F**INALLY, there is the kind of balancing industry that everybody in the town can take a hand in promoting, the "tourist trade." "Tourism" as foreigners call it, which sounds like something catching—as it can be.

Why does the tourist leave home? To see, do, buy, eat, experience something different, to talk about and show around when he gets back. So, veteran builders of tourist trade urge their citizenry, and the places roundabout, to create attractions—things to impart the kick that visitors are looking for.

Southern California has become very adroit at this development of tourist attractions, because it had to draw visitors over the Rockies in its early days. It began with sunshine in winter, oranges and the ocean, and these are still prime attractions, along with mountains for people born and living on the prairies. Then, festivals, pageants, historic places were played up, and tourist events concocted out of materials quite commonplace. Many southern California towns raise vegetables, and stage carrot- and lettuce-packing contests to interest visitors. The Los Angeles area has Disneyland.

Which is all good "tourism," 90 per cent of it, and a pattern to other regions, and being copied.

**W**ASHINGTON, D. C., has abundant natural attractions, historic places, government work, museums. It takes a million dollars a day from visitors. It adds to its attractions with a typical southern California synthetic event, its spring Cherry Blossom festival. Years ago Japan gave the national capital some cherry trees. The festival is fixed on the calendar, visitors come to see the blooms, grandstands are erected, ceremonies held. It may happen that the cherry trees bloom later, if the spring is delayed. That makes no difference, the show goes on, the visitors go home delighted.

Townpeople promoting "tourism" can be developing something else that helps attract industry. Management of the newly acquired business sometimes says that, besides other advantages, it was the neighborliness of the people that helped in the decision, the friendly business climate. This is especially true in places only now beginning to be industrialized. In the Los Angeles area even the police are briefed on courtesy to motorists with out-of-state plates.

Utility companies have a word for all this.

The word is "load."

Jobs and payrolls are "load."

Utility companies have more to do with load than other community agencies.

It seems logical that they should be the ones to deal with it as a fresh angle in their community relations.

# Utility Supervision during a Period of Recession

Some practical suggestions for supervisors and other key personnel on dealing with employees during a period of economic pressure and surplus employee force.

By ALFRED M. COOPER\*

**I**N any period of recession, even a mild one, supervisory problems arise that are peculiar to conditions of labor surplusage. Perhaps less than 50 per cent of the supervisors in today's utilities have functioned during a period of protracted job shortages. It has been more than twenty years since we have experienced even a temporary recession of any duration.

Just how significant the present mild recession may be, exactly when the upturn will arrive, and how long thereafter it will take us to attain to maximum employment again, appear to be questions upon which the experts do not wholly agree.

However, it is evident that there con-

tinue to be indications of unemployment in many industries, with utility management, industrial management generally, and government co-operating to work out means of alleviating the effects of the recession in communities most strongly affected, and later overcoming it.

Whatever those at the top level do to remedy this situation, the degree to which any recession may be helpful or harmful to worker morale depends almost entirely upon the type and quality of day-by-day supervision he receives from his office supervisor or foreman at such a time.

**T**HE supervisor's responsibilities do not increase during any period of recession; the emphasis merely becomes different. This difference stems from the recession itself and the changed mental at-

\*Free-lance writer and author, resident in Indio, California. For additional personal note, see "Pages with the Editors."



## UTILITY SUPERVISION DURING A PERIOD OF RECESSION

titude of the work force at a time when jobs suddenly become less plentiful.

The two most important of the new supervisory responsibilities are: (1) keeping the worker satisfied and interested in his job during a period when he may be genuinely, and perhaps unnecessarily, concerned with the possibility of layoff, and (2) exercising great care that no action taken during the period of recession will result in increased dissatisfaction when industry has completely thrown off the effects of this temporary setback.

Always, when labor surplus exists, there occur increased instances of concealed dissatisfaction among the workers. Present-day supervisors have had plenty of experience in handling the *prima donna* type of employee, who may be a most competent worker, but who may decide to look elsewhere for a job because of an imagined slight.

When dealing with this type of employee it is not necessary to study him closely to determine whether or not he is unhappy. If he is, even slightly, he will tell anybody who will listen exactly how he feels about things. But when new jobs become a little harder to get this temperamental fellow appears to have vanished.

This is, of course, a distinct relief to the supervisor—until he begins to encounter the consequences of concealed dissatisfaction, and discovers that these outcroppings can cause him more trouble than any number of vociferously aired grievances.

**W**HEN an employee notes the lengthening of the queue outside the local unemployment office he does not need an economist to tell him that jobs are getting scarcer.

The methods adopted in any office to reduce the size of the work force, should this become necessary, have much to do with the amount of concealed dissatisfaction that may manifest itself. And it makes no difference whether the office manager works out his own methods of determining who is to go and who is to stay, or whether the routine to be followed is decided higher up and handed down to the supervisor as standard practice to be followed in such instances. In either instance, the worker blames the supervisor who informs him of his layoff.

This is a perfectly natural reaction, and the supervisor will do well to follow meticulously any standard practice worked out as a guide, and thereafter say nothing in self-justification. The experienced supervisor knows that anybody in the office can pass the buck *up* to the supervisor, or *down* to the supervisor. The supervisor, as key man, can pass the buck to no one. He must take the responsibility, just as he hopes at times to be accorded credit. That, of course, is what supervisors are for.

**I**F the supervisor is accorded some say in the matter of layoffs (and because of his unique relationship with his subordinates he certainly should be consulted here) he may find this a very tough assignment, particularly if this happens to be his first experience with even a temporary reduction in the work force.

In a governmental bureau the layoff problem is simplified. Those with least seniority go first. Under private enterprise, the supervisor has more leeway. He can hang onto his best workers; he can get rid of some good workers who have other defects in his opinion; he can be



## PUBLIC UTILITIES FORTNIGHTLY

guided primarily by length of service; he can first drop all women from the payroll who are not family breadwinners; he can let go of single men first and married men later. Or, he can combine certain of these methods, and others, in reaching his decisions.

According to the results of a survey recently published, one in seven men under twenty-four are now unemployed, and one in fourteen women workers of all ages are out of work. Also, the age group least affected is that of "men in their fifties," which appears logical. Women are holding onto their jobs, and the mature men are doing well. (Henry Ford once said it took fifty years for a man to become really valuable in a plant.) In any mild recession there is no need to believe that supervisors will be laid off or demoted; this occurs only when drastic cuts in the work force are to be made and certain departments combined.

**I**F the supervisor permits his own feelings to influence him in recommending specific separations he may enjoy himself for a time, only to discover he has made a peck of trouble for himself after the recession is past, when he finds it necessary to rehire those he has laid off.

It comes as a surprise to some supervisors who have not served through a period of labor surplusage to learn that certain among those who have *not* been laid off may become the most dissatisfied. It might appear that any employee retained at such a time would be altogether happy. But should any of these be dissatisfied with the way payroll cuts have been carried out the result may be increased concealed dissatisfaction. In all likelihood the worker will make no overt complaint—nor will he soon forget about the matter.

In a moderate recession, such as we are now experiencing, further dissatisfaction may develop if expected wage increases do not materialize. The experts point out that most of the pump-priming methods that government sets in motion to alleviate the effects of the recession must have some inflationary result. This may bring about a slight increase in living costs, and this at a time when wage increases are least likely to be granted.

**A**LL of the above considerations must be taken into account when supervising workers during a period of recession. The supervisor should further note that the experts are being very careful in making



**Q** "In any period of recession, even a mild one, supervisory problems arise that are peculiar to conditions of labor surplusage. Perhaps less than 50 per cent of the supervisors in today's utilities have functioned during a period of protracted job shortages. It has been more than twenty years since we have experienced even a temporary recession of any duration. Just how significant the present mild recession may be, exactly when the upturn will arrive, and how long thereafter it will take us to attain to maximum employment again, appear to be questions upon which the experts do not wholly agree."

## UTILITY SUPERVISION DURING A PERIOD OF RECESSION

firm predictions regarding the probable length of the present mild recession. They appear to agree unanimously that it began with the firing of the first sputnik, and a top economist tells us that it will take about two years from the time we "hit bottom" before we can hope to regain maximum production. "Bottom," we are informed, will occur "later in 1958." So the supervisor may consider the matter of layoffs and rehiring as a fairly long-term proposition, always keeping in mind the final effect on employee morale after employment has returned to normal.

However, it should be strongly emphasized that there is nothing in the above admonition that should prevent the supervisor from taking action to improve the quantity and quality of production in his department during a period of labor surplusage. So long as he does not permit personal preferences to guide him, there is no reason why he should not get rid of *any* free-loaders who may have found their way onto the payroll during a period of labor shortage.

**A**s a rule, the occurrence of a period of even mild recession has a sobering effect on all employees, and it is reasonable to expect that some of those who have been doing a bit of "goldbricking" will suddenly see the light and begin hitting the ball. This is an excellent thing. The supervisor's concern thereafter will be primarily with those doubtful ones who fail to bring their output up to normal despite changed economic conditions.

The supervisor has a twofold responsibility here: to management, and to the competent workers in his department. The employee who now refuses to put out, or who is obstreperous, can become a real

pain-in-the-neck to those who must work alongside him.

It is also true that the very employee who refuses to better his work performance at such a time may also be inclined to foment discord among the workers in a department just when it is most essential that excellent employee morale be maintained. The supervisor is going to have enough to worry about without this, and he will be remiss if he does not take any action necessary to put an end to such obstructionist tactics.

**D**URING periods of labor shortage there is likely to develop in any organization a too-soft type of supervision. Where this has happened supervisors may deem it wise at this time to practice exercising more forcefulness in issuing orders, and in checking to see that orders have been carried out as given. Reprimanding also will be done as often as needed.

Even during a period of minor recession management finds it necessary to scrutinize costs a bit more carefully, and inevitably the cost of too-soft supervision will be considered. Supervisors may be instructed to tighten up a bit—not to get hard-boiled in any degree, but to insist on a full day's work from everyone reporting to them. When this happens, the supervisor who has become quite easygoing may find it necessary to tighten up more than a bit; he may have to tighten up a lot. The bad feature here is that this change of attitude may result in resentment that should never have existed.

In such a mild recession as this one promises to be, the foreman or office supervisor should find it not too difficult to solve the problems arising from temporary layoffs, and he may succeed without



### The Uses of Adversity

**"T**HERE is little doubt that a moderate recession at this time may be of real value to all Americans, in that it gives us an opportunity to evaluate our economic situation from both a national and international standpoint. We are going to have more of the sober examination of the problem of serious impending inflation, similar to that which has resulted in excellent revisions in the curriculae of our public schools from coast to coast during the past year, since it was forcibly brought home to us that we are being outdistanced by Russia in training sufficient numbers of scientists and engineers."

---

much trouble in tightening up his supervision just enough to keep quantity and quality of production at desired levels. Usually the employee's knowledge that unemployment is above normal will have the effect of ensuring his complete co-operation.

**I**N a major recession, the like of which we hope never to see again, the situation becomes more serious. At such a time the boss man who can get results when the going is very rugged will be retained. It is questionable whether this type of supervisor is superior to any other; indeed, he may be a rather unpleasant individual to know. But when the chips are down, as in the case of any great national emergency, we are inclined to call on some very tough, unpleasant people to supervise our workers and our armed forces.

The emergency past, we return to our normal state bordering complacency, and tension relaxes. This appears to be our method of progressing toward an ideal, and it will probably succeed in its objective if we do not rush matters in attempting to attain overnight some visionary Utopia.

Perhaps the ideal situation, from the standpoint of good industrial supervision, exists when labor supply makes it possible for the boss man to run his job efficiently, exercising firmness and forcefulness when these qualities are called for, while taking care to practice kindness in all his dealings with subordinates.

Such a supervisory setup offers no excuse for either too-soft or too-tough supervision. It may well be that something approximating this desirable status may be the outcome of the present mild recession. If this should prove to be the case,

## UTILITY SUPERVISION DURING A PERIOD OF RECESSION

any inconvenience we are undergoing may be well worth while.

**I**N one respect there is no change, whether we have shortages or a surplus of labor. That is, the supervisor continues to be responsible for employee morale, and morale always depends upon the degree of interest and satisfaction present in the work force.

The interest factors never change. Craft pride, ambition, desire for change, competitive spirit, good machines and equipment, fear of censure, and loss of job—all of these continue as the great motivating factors that keep any employee interested in his work. And no one is ever in quite so good a position as the immediate superior of these people to see to it that these interest factors are always in operation.

Likewise, worker satisfaction always remains the result of good pay, good working conditions—and equally as important as these two, the quality of supervision he receives.

In addition to checking employee morale, the supervisor, during any period of mild recession, may do well to measure the degree of co-operation that remains in effect, between brother supervisors, and between supervisors and management. In this instance, there exists no cause for any lack of co-operation to develop, since this would have as its basis the fear that the size of the supervisory force was to be reduced. And except in those areas and industries that have been most seriously affected by this recession, there should be little possibility that this will happen.

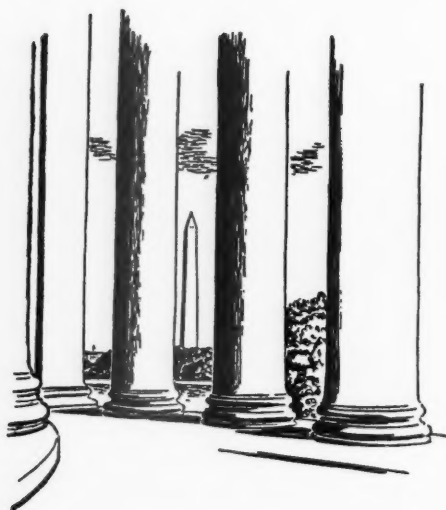
The supervisor's responsibility for the physical condition of his subordinates

should not be affected in any degree by this recession. Any change in personnel resulting from layoffs and rehiring should operate to improve the physical characteristics and stamina of those who make up the work force after this mild recession has become a thing of the past.

There is little doubt that a moderate recession at this time may be of real value to all Americans, in that it gives us an opportunity to evaluate our economic situation from both a national and international standpoint. We are going to have more of the sober examination of the problem of serious impending inflation, similar to that which has resulted in excellent revisions in the curriculae of our public schools from coast to coast during the past year, since it was forcibly brought home to us that we are being outdistanced by Russia in training sufficient numbers of scientists and engineers.

Equally sober consideration of our problem of inflation may lead to similar changes in our thinking on matters of federal and state spending, and in regard to the duty-free imports of every conceivable type of machine and fabricated device from countries with lower living standards than our own. Such matters as these, and many others, we are inclined to brush off carelessly so long as full employment continues in our industries.

**A**s is always true, the manner in which America works its way out of this mild recession will reflect the splendid quality of supervision our workers receive, and the degree to which our office supervisors possess the ability to vary their techniques, so that these may be adapted to changing conditions.



## Washington and the Utilities

### *AEC Authorizations Doubled*

**T**HE Joint Committee on Atomic Energy has expressed its obvious displeasure with the dominant rôle played by the Bureau of the Budget in the atomic energy construction program. The committee's criticism of the bureau is contained in its report to Congress recommending \$386,679,000 in new AEC project authorizations. This amount was less than the \$462.8 million originally requested by the AEC, but roughly twice the amount formally requested after cuts in the program made by the Budget Bureau.

"Again and again," said the report, "the committee was advised that the Bureau of the Budget has disapproved a project, or had withheld funds on a project recommended by the commission and approved by the Congress. This the Joint Committee does not approve." Ignoring the bureau's recommendations, the Joint Committee restored funds cut by the Budget Bureau on all but four projects. It put back 14 research projects eliminated by the bureau, and added funds for five projects which have been deferred by the AEC.

The largest item added to the AEC re-

quests is a \$145 million convertible-type, plutonium-producing reactor at Hanford, Washington. Other nonbudgeted items included in the recommended legislation are: \$6 million for studies on two large-scale power reactors and one intermediate-size power reactor; and \$750,000 for design studies for an advanced power reactor capable of using nuclear superheat, the study to be made either by the AEC or as a co-operative project.

**T**HE authorization bill, which subsequently sailed through both houses of Congress with little difficulty, calls for approximately \$24 million in funds requested by the AEC for its Power Demonstration Reactor Program. It also extends the date for receiving third-round proposals from December 31, 1958, to June 30, 1959. Additional funds are to be made available for co-operative development proposed by the East Central Nuclear Group and Florida West Coast Nuclear Group, and a joint project proposed by Pennsylvania Power & Light Company and Westinghouse Corporation.

The new legislation includes an AEC request for a \$51 million, 40,000-kilowatt



## WASHINGTON AND THE UTILITIES

gas-cooled reactor, with the proviso that if the AEC does not receive an acceptable proposal from private industry to construct the project, the commission itself must build it at an AEC installation. The administration had conditioned construction of this project on an acceptable proposal from private industry.

Following committee action on the 1959 authorization bill, the Senate members of the Joint Committee unanimously recommended confirmation of John A. McCone as a member of the AEC. The recommendation was quickly accepted by the Senate without opposition. McCone was named chairman of the AEC by the President.

### *More Public Works*

AT this writing, Congress had virtually completed action on the fiscal 1959 public works appropriation bill. As passed by the Senate, the bill calls for \$1,160,915,835 in funds for various flood-control and water-resources projects—\$82 million more than voted by the House. The Senate version also includes \$196,000 to permit the Interior Department to complete its studies on the feasibility of a high power dam at the Pleasant Valley site of the Snake river in Idaho. This item was knocked out in the House.

The Senate Appropriations Committee justified its addition of 27 new flood-control and seven new reclamation projects as necessary to "provide a quick stimulus to the economy . . . at a time when it will be most effective." While it is possible that a few added projects may be eliminated in a conference between the two houses, most of them are likely to remain in the bill.

While public works appropriations are rather large for the coming fiscal year, the prospect is that they will be even larger in future years as a result of a new rivers

and harbors, flood-control authorization bill approved by the President. The twice-vetoed bill authorizes \$1.6 billion in new projects. In signing the measure, the President said that "practically all of the shortcomings of these earlier bills have been eliminated."

By eliminating some projects to which he had objected, the President said Congress recognized "established policies governing the review and clearance of reports and the responsibilities of local beneficiaries in sharing the cost of water resources and projects." The new law authorizes 59 navigation, 14 beach erosion, and 66 flood-control projects, including project modifications, estimated to cost \$750 million. It also increases the money limits by \$870 million for 15 approved river basin plans. Congress must still appropriate the money before eventual construction can be started.

TWO other pending public works bills face tougher sledding before they become law. The administration has made it clear that it takes a dim view of a so-called antirecession measure authorizing loans to counties and municipalities for construction of community facilities. It has been argued that such legislation is not needed because local credit is sufficient to support such projects and, in any case, work could not be started soon enough to have any appreciable effect on unemployment figures. There is a strong chance that if the measure passes Congress, it will run into a presidential veto. A bill designed to aid depressed areas faces a similar fate, if approved by Congress.

From the utility viewpoint, the community facility bill reported to the House is a slight improvement over a similar Senate-passed measure. The House bill provides that none of the proposed loans may be used to build facilities in competition with existing private utilities unless

## PUBLIC UTILITIES FORTNIGHTLY

the state regulatory commission certifies that existing service is inadequate. While this limitation was generally understood in the Senate to be a condition for such loans, the Senate measure does not contain a specific provision to that effect.

### *TVA Revenue Bond Bill*

As speculation grew over the probable date of the adjournment of Congress, there was still no indication when the House will get around to considering legislation to authorize TVA to issue revenue bonds for future power development. Controversial measures are usually lost in the shuffle as the date for adjournment draws closer, and it now looks as if the TVA measure will be a last-minute casualty. TVA Chairman Vogel, appearing before a Senate Appropriations subcommittee in support of TVA fund requests, noted that TVA had not requested new funds to finance power supply installations. He said these were badly needed, but added that "we are placing our faith in Congress to provide us with authority to issue revenue bonds to obtain funds" for them.

Supporters of the legislation, which has passed the Senate but has been stymied in the House Rules Committee, are hopeful recent Senate approval of the nominations of Frank J. Welch and Arnold R. Jones to be TVA board members might encourage action in the House.

### *Alaska Co-ops*

OUR forty-ninth state, Alaska, appears to be a land of co-ops. The Co-operative League of the U. S. A. reports that the territory boasts some 60 co-operative enterprises, including 26 credit unions, 13 community fishery co-ops, nine rural electric co-ops, five co-op stores, and one sawmill co-op. The Rural Electrification Act

is one of those federal laws which includes territorial co-ops and REA serves electric and telephone co-ops in Alaska just as it does those in the other forty-eight states. With 60 co-ops or more in Alaska, that figures out to one for every 3,300 people. In the other forty-eight states, Co-operative League figures show there is one co-op for every 4,650.

REA helped celebrate Alaska's bid for statehood with co-op loans totaling more than \$14 million. All loans were for electric service in the territory. Chugach Electric Association, Anchorage, received \$12,230,000 for additional generation and transmission facilities. Homer Electric Association, Homer, received \$1,085,000 for more transmission facilities on the West coast of the Kenai Peninsula. Matanuska Electric Association, Palmer, got \$988,000 for a new distribution line. The REA also approved other electric loans in the United States proper.

### *Aid to Railroads*

BILLS to aid the financially hard-pressed railroads have been passed by both the House and the Senate. The House wrapped up a 5-point package, the major item of which calls for temporary government guaranties of an unlimited amount of private loans for capital improvement and maintenance programs. The Senate has passed a bill limiting loan guaranties to \$700 million.

An important provision of the House bill would give the railroads the option of applying to the Interstate Commerce Commission or state regulatory commissions for permission to discontinue unprofitable lines. ICC's rate-making rules would be changed to provide that, in competitive cases, the commission could determine a carrier's rates without reference to the effect on the traffic of any other type of transportation. The present exemption for

## WASHINGTON AND THE UTILITIES

agricultural products has been eliminated for many products and may not be extended in the future to include any more commodities hauled by truck. So-called "pseudo-private" truck hauls would be subject to ICC regulation.

### *Natural Gas Ruling*

**I**NDPENDENT producers of natural gas were somewhat puzzled as a result of a ruling by the third U. S. circuit court of appeals reversing an FPC order because it did not impose an initial rate as a condition for a certificate of public convenience and necessity. The case, which has been the subject of much discussion in the industry, involves five independent producers, collectively known as the CATCO companies, and their prospective buyer, Tennessee Gas Transmission Company. At issue was the contract price agreed upon between CATCO and Tennessee for the largest sale of natural gas in the history of Louisiana.

The CATCO group had contracted to sell approximately 75 million cubic feet of gas a day, from newly developed offshore fields in the Gulf of Mexico, at a price of 22.4 cents per Mcf. When the application was presented to the FPC, the commission imposed a price condition of 18 cents, including a one-cent gathering tax reimbursement. This condition was rejected by the CATCO companies, which indicated that they would rather sell the gas in intrastate commerce. On appeal of the FPC decision by Tennessee Gas Transmission, the commission reversed itself on the question of price and decided that the huge reserves that would be tapped by Tennessee would be of greater public interest and convenience than the lower price.

The third circuit court ruled that, once

having decided that price was a vital element in determining whether or not a certificate should be issued under § 7(e) of the Natural Gas Act, the FPC could not thereafter grant a certificate without a price condition. In effect, the decision limits the discretionary authority of the FPC to impose initial rate conditions in a certificate proceeding; and while the court did not say so, it clearly implied that it thought the commission should always impose such a condition. This latter view, while not part of the decision, brings the third circuit court into conflict with the U. S. circuit court of appeals for the District of Columbia, which recently held that the FPC has complete discretion in the matter and can only be called to account for an abuse of discretion.

**P**RODUCER reaction to the new court decision has been to adopt a more or less wait-and-see attitude. Some producers are of the opinion that, pending an appeal to the U. S. Supreme Court, the CATCO companies could sell the gas under the contract approved by the FPC and post bond for the possible reduction that would cause them to rebate the difference in price if the court rules against them. Others believe that the producers could withhold any gas from Tennessee Gas Transmission until the rate question is settled.

Meanwhile, it has been reported that negotiations for additional gas reserves in Louisiana stopped abruptly after the court ruling became known. This included one transaction where the price is close to 25 cents per Mcf. The producers involved have apparently decided to wait for further court action before incurring additional drilling expense to develop the known reserves. The latest CATCO check showed 26 completed wells in the field, all waiting for the completion of the connecting pipeline.



### *No Long-distance Rate Case For the Present*

**T**HE FCC will not go in for a general investigation of telephone long-distance rates with a view to a possible general rate reduction. Such was the gist of a letter signed by FCC Chairman Doerfer addressed to Representative Celler (Democrat, New York), chairman of the House Judiciary Committee. Celler's staff, on behalf of his committee, had conferred with the FCC with respect to the current level of interstate rates and earnings of the Bell system. Subsequently, a 15 per cent reduction was ordered by the FCC in rates for leased private lines.

The FCC now claims that, based on its review of "the great number of factors involved, it is the opinion of the commission that a general investigation at this time with respect to the overall level of interstate rates and earnings is not required or warranted." The text of Doerfer's letter to Representative Celler was in part as follows:

The commission has carefully reviewed the current status of the Bell system's interstate earnings. Based on that review, which included consideration of the great number of factors involved, it is the opinion of the commission that a general investigation at this time with respect to the overall level of

## Telephone and Telegraph

interstate rates and earnings is not required or warranted. We shall, of course, continue our practice of maintaining a continuing surveillance over these matters. You may rest assured that the commission will promptly take appropriate action by formal proceedings or otherwise as may be necessary should the circumstance indicate that such action is required in order to protect the interest of the public in just and reasonable telephone rates.

You are aware that formal proceedings have been pending for some time before this commission involving the rates and earnings of the Bell system and Western Union applicable to their private line services. These proceedings are affording the commission an opportunity to review general rate-making principles and policies in the telephone field and may result in rate adjustments for private line services.

**O**N July 7th the Bell telephone system petitioned the FCC to reconsider and rescind its order of June 25th, which directed that private line telephone rates be reduced 15 per cent despite the fact that rates for these services are from 30 to 50 per cent below prewar levels. Should the commission deny this petition, the company requested permission to file tariffs immedi-



## TELEPHONE AND TELEGRAPH

ately to increase private line teletypewriter rates, the earnings from which are now approaching the vanishing point.

James E. Dingman, director of operations of the Long Lines Department of American Telephone and Telegraph Company, said "The cost studies put in evidence during the current FCC investigation of Bell and Western Union private line services show that our telephone and teletypewriter services combined earned only 6.4 per cent on investment in 1955. The commission's order would cut current earnings to less than 4½ per cent which is confiscatory.

"Teletypewriter services, considered alone, are earning only about 1.5 per cent and it would be clearly inequitable to reduce rates on the telephone portion of the service unless teletypewriter rates are increased at the same time."

Mr. Dingman said the commission order "clipped the economic legs from under one segment of our service without providing support for the other."

"Furthermore," Mr. Dingman added, "earnings should be around 10 per cent for these valuable services in which networks are set aside for the exclusive use of customers. Many of these networks consist of thousands of miles of circuits that cross and recross the nation. Customers who use private line services do so because they are fast and convenient and are priced at bargain rates far below message service."

### *Justice Eyes Menomonee Falls Acquisition Case*

THE "antitrust implication involved in the Bell system's overall position" has been pointed out to the FCC by the Justice Department. The department, in a letter from Assistant Attorney General Victor R. Hansen, made this suggestion in con-

nection with a proposed purchase of independent telephone property in Wisconsin by the Wisconsin Telephone Company.

The proposed acquisition of independent telephone exchanges in Menomonee Falls and Lisbon, Wisconsin, had been opposed by the United States Independent Telephone Association on grounds that other independent companies are ready, willing, and able to purchase the properties. The case has already been heard and two FCC examiners are now studying briefs. Incidentally, the FCC staff brief suggests that the Wisconsin sale should be approved by the FCC. The Justice Department letter was written by Hansen at the suggestion of Representative Celler.

Hansen pointed out that in view of the position now occupied by the Bell system "any additional acquisitions of telephone properties will serve to enhance the Bell system's present position in the industry." Hansen's letter conceded that there could be no antitrust violation in the acquisition of the independent telephone property by the Wisconsin Telephone Company, if the FCC approved the transaction under the Federal Communications Act. But the very fact that such approval would remove the changed industrial relationship from antitrust consideration doubtless explains, in part, the Justice Department's concern that the monopoly factor be given such serious consideration by the FCC.

### *Financial Impact of Radio Licensing*

THE U. S. court of appeals for the District of Columbia circuit ruled on July 10th that grants of radio station licenses sometimes may properly hinge on the financial harm that might be done to existing stations. The court emphasized, however, that the key factor is not whether revenues of existing stations might be cut



## PUBLIC UTILITIES FORTNIGHTLY

but whether the public would suffer because of poor service or possibly no service at all.

"Economic injury to an existing station, while not in and of itself a matter of moment, becomes important when on the facts it spells diminution or destruction of service," the court said.

The opinion came in a controversy between the Carroll Broadcasting Company, which operates a radio station on 1,100 kilocycles in Carrollton, Georgia, and the West Georgia Broadcasting Company, which wanted to build a station in Bremen, Georgia, to operate on 1,440 kilocycles.

### *Allowance for Attrition*

THERE is increasing evidence that some of the regulatory commissions are giving increasing recognition to the "attrition" factor in telephone rate cases. This factor, usually reflected in the return allowance—where allowed—endeavors to compensate for the actual shrinkage in the amount of return eventually realized as compared with the amount estimated and found as reasonable at the time of rate fixing. It is of great importance during periods of rapid inflation. The subject was given special consideration by the California commission in denying a petition for rehearing on its recent order allowing a rate increase for the Pacific Telephone & Telegraph Company.

The California commission's order stated in part:

The only point made in these petitions for rehearing which merits serious consideration is the contention by the petitioners, city of Los Angeles and Roger Arnebergh, that the rate of return actually allowed applicant is 6.85

per cent rather than 6.75 per cent. Arithmetically, the computations do result in a figure of 6.85 per cent but petitioners overlook the fact that the return which the commission prescribed was to result in a rate of 6.75 per cent, after giving effect to a reasonable attrition in that return which past experience with this applicant shows, reasonably, must be expected. The phenomenal growth of this applicant in response to the ever-increasing demand by the public for telephone service in California, we find, has a direct tendency to create a consistent downtrend in applicant's rate of return which we have allowed for by setting the return at 6.85 per cent which we find, reasonably, will stabilize at 6.75 per cent for a reasonable future period.

LIKEWISE the New Jersey commission, in its recent order authorizing a rate increase for the New Jersey Bell Telephone Company, boosted a 1957 depreciated original cost rate base by 5 per cent (or \$25.5 million) to compensate for attrition. The New Jersey commission opinion stated at that time:

Many suggested methods of dealing with the problem have been advanced before this board and to the regulatory agencies of other jurisdictions. Among the alternatives we have considered are adjustment in the rate of return, reproduction cost rate base, trended original cost rate base, and other techniques for applying economic indices to original cost. We have found serious defects in these proposals, many of which have been discussed at length in previous decisions. It is clear, in any event, that the board is not bound by any single formula or combination of formulae in determining a rate base.

# Financial News and Comment

By OWEN ELY



## *Britain Claims New 500,000-Kilowatt Atomic Power Plant Will Be "Competitive"*

**A**PPOINTMENT of John A. McCone of Los Angeles as an AEC commissioner (also replacing Admiral Strauss as chairman) is not expected to change greatly the commission's policies and objectives. But relations with the powerful Joint Committee on Atomic Energy of Congress may be somewhat more harmonious in the future. McCone, a West coast industrialist, has for some years been intensely interested in atomics, and is no stranger to Washington as he served as Under Secretary of the Air Force under President Truman. According to *Newsweek* he "is a model of well-directed deliberate energy—an efficient new power source for the nation's atom program."

In the past the commission has opposed government construction of large-scale

atomic power plants, holding that a partnership policy should be followed as with hydro-power development. Investor-owned utilities have co-operated in providing part or all of the funds for a number of plants planned or under construction, with the federal contribution stressing research costs, sale of fuel, purchase of by-products, etc. Recently, however, under the impact of heavy construction costs, private interest has waned somewhat.

**M**EANWHILE some of the military services, which want to develop a miniature atomic weapon for infantrymen, have complained that they are not getting enough plutonium. This man-made element, which in some respects has better fuel qualities than U-235, is more poisonous than the latter. The commission is building a \$10 million research plant to try, by dilution and otherwise, to make it a safer fuel. But the Joint Committee does not want to wait for this, and wishes to proceed immediately with a plutonium-producing reactor (presumably an improved version of the Enrico Fermi plant now under construction) which would cost about \$125 million. Because England has apparently been successful at the Calder Hall plant in the use of natural uranium, the committee also wants to build

### DEPARTMENT INDEX

	<i>Page</i>
Britain Claims New 500,000-kilowatt Atomic Power Plant Will Be "Competitive" .....	177
Map of U. S. Showing Atomic Power Projects .....	179
Table—Utility Financing in First Half of 1958 .....	181
Current Yield Yardsticks .....	182
Calendar of Proposed Utility Offerings .....	183
Table—Data on Electric Utility Stocks .....	183, 184, 185

## PUBLIC UTILITIES FORTNIGHTLY

a \$60 million natural uranium reactor and a \$50 million plant to use slightly enriched uranium.

THE administration, working through the AEC and the Budget Bureau, has thus far indicated an interest only in the \$50 million plant. With the budget getting out of balance, economy is again a factor. The Joint Chiefs of Staff are said to be reviewing the military need for plutonium. Nevertheless, the House and Senate have passed bills authorizing expenditure of \$387 million, or about double the amount proposed by the administration.

Senator Anderson (Democrat, New Mexico), former chairman and now vice chairman of the Joint Committee, has also suggested that the government offer construction subsidies to private companies building atomic power plants, to cover as much as 90 per cent of the difference between nuclear and conventional power station costs. He thinks that some \$1.5 billion should be spent on an expanded atomic power program over the next five to seven years. This would include 21 reactors—nine large, four of intermediate size, three small, and five experimental. However, half of these might be abandoned after design and feasibility studies are completed.

Meanwhile, the British are proceeding rapidly with their commercial program. The Calder Hall plant is reported operating successfully, a new 500,000-kilowatt plant was started last September, and nuclear power capacity totaling 1.4 million kilowatts is predicted for 1962. France also talks about having 850,000 kilowatts by 1965—320,000 is under construction and plans completed for 150,000 kilowatts more. Little has been heard from Russia recently, and earlier predictions of 2.5 million-kilowatt atomic capacity by 1960 is now considered overoptimistic.

THE big British plant at Hinkley Point in Somerset, not far from Calder Hall and other projected plants on the Bristol Channel, is expected to cost \$165 million for construction, or \$308 per kilowatt; including initial fuel the cost would reach \$381. The plant is being built for the Central Electricity Generating Board by English Electric, Babcock & Wilcox, and Taylor Woodrow. Concrete foundations for the first of the two reactors at this plant were completed in April.

English Electric recently sent Dr. H. S. Arms, chief engineer of its atomic power division and a former American, to the United States. Through Tyndall Associates a press conference was called and a great deal of interesting literature about the project and about the cost of generating power was distributed. The company is seeking a tie in with some American concern, for cross-licensing of patents and exchange of information. Dr. Arms thinks that the huge new plant can produce electricity at a cost of less than 7.6 mills per kilowatt-hour, which is said to be the national average for fuel-fired generating plants in England. But as so frequently happens with such estimates, the lack of detail makes it difficult to appraise the figure. However, the comparison with the cost of producing electricity in British fuel-burning plants is presumably on a similar basis and helps to explain the urgency of the British program.

DR. ARMS estimated that it would cost 50 per cent more, or about \$504 per kilowatt, to build a plant of this type in the U. S. This is substantially higher than the cost of atomic plants now being constructed in this country, it would seem, though up-to-date figures are lacking. The cost of the projected plant of Pacific Gas

## FINANCIAL NEWS AND COMMENT

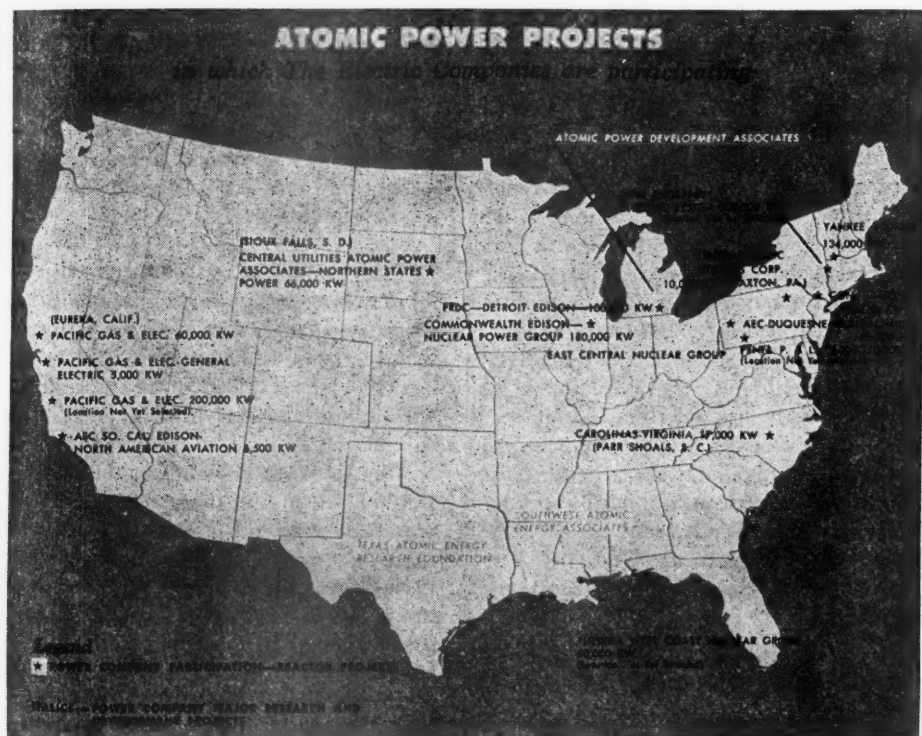
and Electric (which is also claimed to be competitive with fuel-burning plants in its area) would be about \$333-\$400 per kilowatt.

However, U. S. plants use enriched uranium, reducing plant cost but increasing fuel expense.

**T**HE English Electric release speaks about the cost of steam-generated electrical power in the United States as ranging from 3.5 to 8.0 mills. The so-called "production cost" of generating steam power averaged 4.04 mills for the United States in 1956, and American Electric Power system, considered one of the most efficient utilities, reported only 2.6 mills per kilowatt-hour in 1957. To this 4 mills would presumably be added

about 15 per cent of the cost of the generating plant—15 per cent being a rule-of-thumb figure representing cost of capital, depreciation, and taxes. This might work out at about 2-3 mills per kilowatt-hour as a rough approximation, making a total around 6-7 mills as the U. S. average "cost of power." (Of course this represents less than half the cost of power when *finally delivered to the customer*, which in 1957 averaged 16.7 mills.)

The Hinkley plant will include two natural uranium graphite-moderated, gas-cooled reactors and 12 boilers feeding six 93,500-kilowatt turbines. The plant will require 35 million gallons of water hourly for cooling purposes. The 500,000-kilowatt output will be nearly seven times greater than that of Calder Hall A station,





## PUBLIC UTILITIES FORTNIGHTLY

which was opened in October, 1956. While the new reactors will be similar to those of Calder Hall they will cost nearly one-fifth less per kilowatt, partly due to relaxation in safety standards. The construction period is five years, although the first reactor will be in use some months earlier. Used fuel will be stored in ponds. About 325 men will be required to run the station, including a few physicists. While designed to operate at 100 per cent load, the station can be operated flexibly.

**T**URNING again to the question of power costs, we note that Paul Wolf, chief reactor engineer of English Electric, has estimated fuel and replacement costs at 2.1 mills, and plant costs at 5 mills, or a total of 7.1 mills. This would not include operation and maintenance costs, which perhaps explains the difference of .5 mill as compared with Dr. Arms' 7.6 mill estimate.

Some of the basic assumptions made by Mr. Wolf were a bank rate of 6 per cent, 15-year amortization, an efficiency rating of 27 per cent, and an 80 per cent load factor. Based on this calculation it would appear that the British figures relate only to production costs, plus an interest cost for construction facilities only; they obviously do not include transmission, distribution, and administrative costs and probably a minimum, if any, for taxes.

Various estimates continue to appear regarding U. S. costs of atomic power. A recent study for boiling water reactors was published by American-Standard's atomic energy division. For a plant of 100,000 kilowatts, with a construction cost of \$306 per kilowatt, operating costs were calculated as follows:

	<i>Mills</i>
Capital Charge (15 Per Cent) ..	6.6
Fuel Cycle Cost .....	2.3
Heavy Water—Losses .....	.8

Heavy Water—Inventory (12 Per Cent) .....	1.4
Operating and Maintenance ....	1.2
Total .....	12.3

In a recent study presented by Walter Dreyer before the California Institute of Technology he drew the following practical conclusions: In areas where the cost of conventional fuel is 50 cents per million Btu, hydro power would be the most economic source; the next would be nuclear plants, costing \$300 per kilowatt and operated at over 75 per cent capacity; but with nuclear costs reduced to \$250, nuclear power would be cheaper at all capacity factors. Where conventional fuel costs 40 cents per million Btu or less, a nuclear plant costing \$300 would be uneconomic but a \$250 plant would be the best power source at capacity factors exceeding 55 per cent. With still further declines in conventional fuel, a \$250 nuclear plant would have to operate at 90 per cent or more capacity to approach a competitive level with steam. Where conventional fuel is 20 cents per million Btu, nuclear energy would not be competitive under any conditions.

**T**HE committee on productive uses of nuclear energy of the National Planning Association has recently estimated that by 1980 atomic energy will supply less than 10 per cent of total U. S. power, with an atomic plant investment of some \$10 billion.

This estimate is based on the assumption that during the intervening period reserves of coal, oil, and gas will remain quite ample and that prices of the conventional fuels are unlikely to increase by more than 25 per cent. The report forecast a cost of 12 mills per kilowatt-hour in large-scale atomic energy plants by 1965, and 6 mills by 1980. Atomic power would first be competitive in New Eng-



PUBLIC UTILITIES SECURITIES OFFERED FOR SUBSCRIPTION AND/OR SALE (000 omitted)						
	January 1 to June 30, 1958			January 1 to June 30, 1957		
	Total	Electric Companies	Gas Companies	Telephone Companies	Other Companies	Other Companies
Long-Term Debt Offered Publicly Offered through Subscription Offered Privately	\$1,658,314 739,013 216,113	\$1,199,500 19,700 82,893	\$278,566 97,850 97,850	\$175,000 30,000 30,000	\$5,248 5,400 5,400	\$4,000 44,521 13,550
Total	\$2,612,470	\$1,302,093	\$376,416	\$223,313	\$10,648	\$630,596
Preferred Stock Offered Publicly Offered through Subscription Offered Privately	\$248,000 3,000 12,300	\$164,500 3,000 12,300	\$78,000 - -	\$5,500 - -	- - -	\$2,250 400 3,500
Total	\$263,300	\$179,800	\$78,000	\$5,500	-	\$5,750
Common Stock Offered Publicly Offered through Subscription	\$29,212 181,323	\$38,203 118,106	\$31,416 30,725	\$22,593 34,532	- -	\$1,688 20,218
Total	\$275,535	\$156,309	\$62,121	\$57,105	-	\$21,321
Total Financing	\$3,151,105	\$1,638,002	\$516,537	\$285,918	\$10,648	\$663,747
SEGREGATION OF FINANCING - BY PURPOSE						
Total Refundings	\$187,189	\$59,400	\$12,789	\$115,000	-	\$825
Total Dividends	-	-	-	-	\$35,881	\$21,218
New Money	\$2,425,281	\$1,242,693	\$363,627	\$808,313	\$10,648	\$17,550
Long-Term Debt	263,100	179,600	78,000	5,500	-	4,965
Preferred Stock	275,535	156,309	62,121	57,105	-	21,321
Common Stock	\$2,425,281	\$1,242,693	\$363,627	\$808,313	\$10,648	\$17,550
Total New Money	\$2,963,916	\$1,578,602	\$503,748	\$870,918	\$10,648	\$22,475
Total Financing	\$3,151,105	\$1,638,002	\$516,537	\$285,918	\$10,648	\$663,747
SEGREGATION OF FINANCING - BY TYPE						
Competitive Bidding	\$1,516,368	\$1,189,968	\$132,000	\$175,000	\$1,516,368	\$1,516,368
Negotiated Sale:	\$481,558	\$212,235	\$235,982	\$28,093	\$5,248	\$11,898
Subscription	\$14,528	\$14,528	\$29,868	\$1,586	-	\$50,483
Competitive Bidding	156,398	124,944	29,868	1,586	-	53,388
Negotiated Sale	753,510	3,314	837	751,239	-	12,260
No Underwriting	\$24,136	\$14,806	\$30,705	\$732,825	-	\$65,139
Total Subscription	\$284,243	\$94,993	\$97,850	\$30,000	\$5,400	\$114,300
Private Sales	\$3,151,105	\$1,638,002	\$516,537	\$285,918	\$10,648	\$663,747
Total Financing	\$3,151,105	\$1,638,002	\$516,537	\$285,918	\$10,648	\$663,747

Esaco Services Incorporated, Corporate Finance Department, July 9, 1958 - AVR

## PUBLIC UTILITIES FORTNIGHTLY

land, where generating costs are 50 per cent higher than the national average.

The British presumably are motivated, in predicting competitive atomic power costs, by hopes of exporting reactors to other high-fuel cost countries, such as Japan, West Germany, Italy, Australia, etc.

English Electric expects to "turn a profit this year or next" in the manufacture of large reactor plants, and British manufacturers predict that by the end of this year they will have received very substantial orders from abroad for nuclear power plants or component parts.

The U. S. has been active in the foreign field in exporting small research reactors. Under the "atoms-for-peace" program, we pay half the cost of such reactors up to \$350,000 each, and lease the required enriched uranium. President Eisenhower recently presented to Congress the draft of an international agreement with the European Atomic Energy Community (EURATOM), but there seems to be some doubt whether the bill can get through this session. If Congress approves, the U. S. would aid in a one million-kilowatt program of nuclear power development in Europe.

The six EURATOM countries—France, West Germany, Belgium, Luxembourg, Holland, and Italy—would build six commercial atomic power plants based

on U. S.-type reactors. Enriched reactor fuel would be supplied by the United States.

THESE plants are expected to cost about \$350 million, of which \$135 million would be in the form of a long-term loan by the Export-Import Bank. However, the plants would be built, owned, and operated by utilities in the member states. The U. S. would guarantee ceiling costs for fabrication of the fuel elements as well as a fixed life for these elements, over a ten-year operating period. The U. S. and EURATOM will both contribute about \$50 million over the first five years covering research and development.

Comparatively little material has appeared recently on the potentialities of commercial power from the fusion process. The British seem to have given up their claims of a "breakthrough." At the forthcoming second international conference at Geneva, AEC scientists are expected to disclose more details of our fusion machines and test results. While twelve nations will report on fusion research, the limelight will be centered on U. S. and Russian disclosures. The U. S. is scheduled to give 57 papers on fusion. At the same time 46 U. S. concerns, and companies from 13 other nations, will be displaying their atomic wares at a commercial nuclear show in downtown Geneva.

### CURRENT YIELD YARDSTICKS (Standard & Poor's Indexes)

	July 9, 1958	1957-58 Range High Low	1956-57 Range High Low
Utility Bonds—A1+ .....	3.70%	4.38% —3.58%	3.87% —3.06%
—A1 .....	3.75	4.41 —3.61	3.96 —3.10
—A .....	3.94	4.70 —3.85	4.21 —3.27
—B1+ .....	4.42	5.21 —4.20	4.39 —3.37
Preferred Stocks* .....	4.34	4.86 —4.26	4.65 —3.97
Utility Common Stocks .....	4.36	5.44 —4.36	4.98 —4.50

\*Twelve industrial and two utility issues (high-grade).

# FINANCIAL NEWS AND COMMENT

## CALENDAR OF PROPOSED UTILITY OFFERINGS

July 25th-October 31st

Date of Bidding Or Sale	Approx. Amount (Millions)	Bonds	Method Of Offering	Probable Moody Rating*
8/11	\$20	Utah P. & L. Bonds 1988 .....	C	A
8/12	20	Montana Power Mortgage Bonds 1988 .....	C	Aa
8/13	45	Consolidated Natural Gas Bonds .....	C	Aaa
8/20	60	Public Service E. & G. Bonds .....	C	Aa
8/25	50	Southern California Edison Mortgage Bonds .....	C	Aa
8/26	40	New England Tel. & Tel. Debentures .....	C	Aa
9/23	25	Consumers Power Bonds .....	C	Aaa
9/30	110	Southwestern Bell Telephone Bonds .....	C	Aaa
9/	20	Texas Eastern Transmission Debentures .....	N	Ba
9/	—	Texas Power & Light Bonds .....		Aa
10/	20	Transcontinental Gas Pipe Line Bonds .....	N	Baa
10/9	30	Columbia Gas System Debentures .....	C	A
<i>Preferred Stocks</i>				
7/30	3	Missouri Public Service .....	C	
9/23	25	Consumers Power Pfd. ....	C	
<i>Common Stocks</i>				
7/23	8	Washington Water Power .....		

C—Competitive. N—Negotiated. \*Based on rating of outstanding issues.



## DATA ON ELECTRIC UTILITY STOCKS

Annual Rev. (Mill.)			7/9/58 Price About	Divi- dend Rate	Approx. Yield	Recent Share Earnings	% In- crease	Aver. Incr. In Sh. Earns. 1952-57	Price- Earn. Ratio	Div. Pay- out	Approx. Common Stock Equity
\$284	S	American Elec. Power	43	\$1.60	3.7%	\$2.22My	7%	9%	19.4	72%	33%
50	O	Arizona Public Serv.	32	1.20	3.8	*1.81Ma	2	7	*17.7	66	27
11	O	Arkansas Mo. Power	20	1.00	5.0	1.43Ma	7	2	14.0	70	32
32	S	Atlantic City Electric	37	1.40	3.8	1.85My**	11	10	20.0	76	28
142	S	Baltimore Gas & Elec.	40	1.80	4.5	2.19Ma	D11	6	18.3	82	43
7	O	Bangor Hydro-Electric	35	1.90	5.4	2.16Ma	D19	4	16.2	88	36
6	O	Black Hills P. & L.	27	1.44	5.3	2.11Ap	D6	3	12.8	68	30
104	S	Boston Edison	56	2.80	5.0	3.12De	D10	—	17.9	90	47
24	A	Calif. Elec. Power	17	.76	4.5	*1.02Ma	D9	1	*16.7	75	28
23	O	Calif. Oreg. Power	33	1.60	4.8	1.91F	D16	2	17.2	84	35
8	O	Calif. Pac. Util.	31	1.60	5.2	2.34My	1	3	13.2	68	30
67	S	Carolina P. & L.	33	1.32	4.0	1.95My	15	4	16.9	68	40
30	S	Cent. Hudson G. & E.	17	.80	4.7	1.14Ma	6	6	14.9	70	31
23	O	Cent. Ill. E. & G.	37	1.60	4.3	2.57My	10	11	14.4	62	36
37	S	Cent. Ill. Light	31	1.40	4.5	2.05Ap	5	9	15.1	68	34
53	S	Cent. Ill. P. S.	35	1.68	4.8	2.56My	10	13	13.7	66	40
15	O	Cent. Louisiana Elec.	37	1.60	4.3	2.25Ma	16	8	16.7	71	30
38	O	Cent. Maine Power	25	1.40	5.6	*1.87My	D1	5	*13.4	75	32
137	S	Cent. & South West	50	1.70	3.4	2.44Ma	10	10	20.5	70	40
12	O	Cent. Vermont P. S.	18	1.00	5.6	*1.11Ap	D7	2	*16.2	90	33

## PUBLIC UTILITIES FORTNIGHTLY

Annual Rev. (Mil.)	(Continued)	7/9/58 Price About	Divi- dend Rate	Approx. Yield	Recent Share Earnings	% In- crease	Aver. In Sh. Earnings 1952-57	Price- Earnings Ratio	Div. Pay- out	Approx. Common Stock Equity
121	S Cincinnati G. & E. ....	34	1.50	4.4	1.99Ma	—	9	17.1	75	39
7	O Citizens Util. "B" .....	21	1.00	4.8	*1.22Ma	6	7	*17.2	82	40
119	S Cleve. Elec. Illum. ....	40	1.60	4.0	2.62Ma	3	11	15.3	61	50
5	O Colo. Cent. Power .....	30	1.32	4.4	1.79Ma	D1	4	16.7	74	41
44	S Columbus & S. O. E. ....	33	1.60	4.8	2.36My	D2	5	14.0	68	30
380	S Commonwealth Ed. ....	50	2.00	4.0	2.89Ma	4	5	17.3	69	40
13	A Community Pub. Ser. ....	29	1.30	4.5	1.96Ma	5	6	14.8	66	45
75	O Conn. Lt. & Pr. ....	20	1.00	5.0	*1.32My	18	5	*15.2	76	34
582	S Consol. Edison .....	56	2.80	5.0	*3.66Ma	16	6	*15.3	77	38
221	S Consumers Power .....	54	2.40	4.4	3.28My	4	5	16.5	73	38
78	S Dayton P. & L. ....	50	2.40	4.8	3.32Ma	2	2	15.1	72	38
49	S Delaware P. & L. ....	55	2.00	3.6	2.83Ma	7	12	19.4	71	30
251	S Detroit Edison .....	41	2.00	4.9	2.45My	D2	11	16.7	82	44
136	A Duke Power .....	39	1.40	3.6	2.23Ma	14	15	17.0	63	47
99	S Duquesne Light .....	40	2.00	5.0	2.60Ma	7	4	15.4	77	34
32	O East. Util. Assoc. ....	36	2.20	6.1	2.61My	14	0	13.8	84	34
2	O Edison Sault Elec. ....	16	.80	5.0	1.18De	10	24	13.6	68	33
14	O El Paso Elec. ....	26	1.00	3.8	1.44Ap	1	9	18.1	69	37
12	S Empire Dist. Elec. ....	21	1.20	5.7	1.43Ma	D12	3	14.7	84	32
52	S Florida Power Corp. ....	70	2.00	2.9	3.26Ma	10	13	21.5	61	34
131	S Florida P. & L. ....	70	1.52	2.2	3.17Ma	17	22	22.1	48	39
202	S General Pub. Util. ....	46	2.00	4.3	*3.27Ma	11	9	*14.1	61	41
7	O Green Mt. Power .....	17	1.00	5.9	1.18Ma	D3	7	14.4	84	36
62	S Gulf States Util. ....	45	1.80	4.0	2.14My	D7	11	21.0	84	31
49	A Hartford E. L. ....	63	3.00	4.8	*4.35Ma	8	10	*14.5	68	41
24	O Hawaiian Elec. ....	49	2.50	5.1	3.01Ma	D10	12	16.3	83	36
87	S Houston L. & P. ....	59	1.60	2.7	2.79My	8	11	21.1	57	42
28	S Idaho Power .....	40	1.60	4.0	2.43Ma	11	12	16.5	66	31
87	S Illinois Power .....	35	1.50	4.3	2.03My	8	7	17.2	74	34
46	S Indianapolis P. & L. ....	35	1.50	4.3	2.13Ma	2	7	16.4	70	35
26	S Interstate Power .....	17	.85	5.0	1.06Ma	2	2	16.0	80	31
36	O Iowa Elec. L. & P. ....	32	1.50	4.7	2.14My	10	5	15.0	70	38
41	S Iowa-III. G. & E. ....	37	1.80c	4.8	2.55Ap	2	3	14.5	70	38
39	S Iowa Power & Lt. ....	33	1.60	4.8	2.03Ma	—	4	16.3	79	30
34	O Iowa Pub. Serv. ....	16	.80	5.0	1.16My	10	8	13.8	69	35
14	O Iowa South. Util. ....	26	1.28	4.9	1.97My	17	5	13.2	65	40
61	S Kansas City P. & L. ....	46	2.00	4.3	3.00My	5	7	15.3	66	37
32	S Kansas G. & E. ....	37	1.40	3.8	2.39Ma	5	13	15.5	59	30
48	S Kansas Pr. & Lt. ....	29	1.30	4.5	2.00Ma	D1	7	14.5	65	31
39	O Kentucky Util. ....	30	1.40	4.7	2.07Ma	1	3	14.5	68	36
7	O Lake Superior D. P. ....	24	1.20	5.0	1.64Ma	—	3	14.6	73	39
110	S Long Island Lighting ....	27	1.20	4.4	1.55Ma	7	5	17.3	77	34
56	S Louisville G. & E. ....	36	1.20	3.3	2.09Ma	30	3	17.2	57	41
10	O Madison G. & E. ....	49	1.80	3.7	3.86Ma	D5	11	12.7	47	45
5	A Maine Pub. Service ....	20	1.16	5.8	1.40Ap	3	7	14.3	83	37
6	O Michigan G. & E. ....	54	1.60	3.0	4.36Ma	8	8	12.4	37	40
172	S Middle South Util. ....	44	1.80	4.1	2.57My	11	6	17.1	70	35
30	S Minnesota P. & L. ....	33	1.60	4.8	2.61Ma	23	11	12.6	61	33
3	O Miss. Valley P. S. ....	29	1.40	4.8	2.07My	D3	3	14.0	67	32
13	A Missouri Pub. Serv. ....	16	.72f	4.5	1.05My	11	9	15.2	69	29
7	O Missouri Util. ....	25	1.36	5.4	1.73Ma	D4	3	14.4	79	33
44	S Montana Power .....	55	2.00	3.6	*3.80Ap	NC	8	*14.5	53	41
159	S New England Elec. ....	18	1.00	5.6	1.24Ma	5	0	14.5	81	34
46	O New England G. & E. ....	19	1.05	5.5	1.53Ma	8	5	12.4	69	41
49	O New Orleans P. S. ....	44	2.25	5.1	3.28My	25	0	13.4	69	39
3	O Newport Electric .....	19	1.10	5.8	1.24My	D1	—	15.3	89	31
89	S N. Y. State E. & G. ....	48	2.00	4.2	*3.38My	12	6	*14.2	59	37
255	S Niagara Mohawk Pr. ....	36	1.80	5.0	*2.04Ap	2	—	*17.6	88	28
87	O Northern Ind. P. S. ....	43	2.00	4.7	3.05Ap	NC	6	14.1	66	37
148	S Nor. States Power .....	22	1.00	4.5	1.28Ma	7	4	17.2	78	33
10	O Northwestern P. S. ....	18	1.00	5.6	1.49Ma	18	0	12.1	67	27
136	S Ohio Edison .....	56	2.64	4.7	3.57My	1	5	15.7	74	41
50	S Oklahoma G. & E. ....	50	1.90	3.8	2.64Ma	8	5	18.9	72	30
21	O Orange & Rockland Utils.	20	.90	4.5	*1.12Ma	NC	15	*17.9	80	26

# FINANCIAL NEWS AND COMMENT

Annual Rev. (Mill.)	(Continued)	7/9/58 Price About	Dividend Rate	Approx. Yield	Recent Share Earnings	% Increase	Aver. Incr. In Sh. Earnings 1952-57	Price-Earn. Ratio	Div. Pay-out	Approx. Common Stock Equity
16	O Otter Tail Power .....	30	1.60	5.3	2.23My	2	1	13.5	72	34
501	S Pacific G. & E. ....	56	2.40	4.3	3.59Ma	8	10	15.6	67	34
50	O Pacific P. & L. ....	36	1.60	4.4	*2.13Ma	NC	5	*16.9	75	28
129	S Penn Power & Lt. ....	48	2.40	5.0	3.12My	D6	9	15.4	77	30
236	S Phila. Elec. ....	42	2.00	4.8	*2.68Ap	2	4	*15.7	75	39
36	O Portland Gen. Elec. ....	26	1.20	4.6	1.67My	2	8	15.6	72	37
69	S Potomac Elec. Pr. ....	25	1.20	4.8	*1.53Ma	D3	3	*16.3	78	32
91	S Pub. Serv. of Colo. ....	45	1.80	4.0	2.69Ma	—	7	16.7	67	36
322	S Pub. Serv. E. & G. ....	36	1.80	5.0	2.24Ma	4	3	16.1	80	34
79	S Pub. Serv. of Ind. ....	41	2.00	4.9	2.76My	6	3	14.8	72	38
32	O Pub. Serv. of N. H. ....	19	1.00	5.3	1.29Ma	D11	6	14.7	78	36
13	O Pub. Serv. of N. M. ....	21	.80g	3.8	1.24Ma	5	8	16.9	65	35
27	S Puget Sound P. & L. ....	31	1.36	4.4	*1.85Ma	8	16	*16.8	74	50
60	S Rochester G. & E. ....	36	1.60	4.4	2.21Ma	D1	2	16.3	72	32
8	S St. Joseph L. & P. ....	28	1.50	5.4	2.02Ma	5	8	13.9	74	32
54	S San Diego G. & E. ....	23	.96	4.2	1.33My	D7	D	17.3	72	36
10	O Savannah E. P. ....	24	1.00	4.2	1.51My	27	25	15.9	66	30
10	O Sierra Pacific Pr. ....	29	1.40	4.8	1.85My	D6	12	15.7	76	30
217	S So. Calif. Edison ....	56	2.40	4.3	3.20Ma	—	D	17.5	75	33
46	S So. Carolina E. & G. ....	28	1.20	4.3	1.72My	23	15	16.3	70	36
7	O Southern Colo. Pr. ....	16	.80	5.0	1.31F	D1	8	12.2	61	38
255	S Southern Company ....	33	1.20	3.6	1.71My	13	8	19.3	70	32
19	S So. Indiana G. & E. ....	33	1.60	4.8	2.46My	17	2	13.4	65	37
7	O So. Nevada Power ....	23	1.00	4.3	1.40Ap	D9	9	16.4	71	40
1	O Southern Utah Power ....	19	1.00	5.3	1.36Ap	D12	0	14.0	73	39
3	O Southwestern E. S. ....	25	1.24	5.0	1.83De	12	3	13.7	68	28
42	S Southwestern P. S. ....	36	1.48	4.1	1.74My	D1	5	20.7	85	35
30	A Tampa Electric ....	39	1.20	3.1	1.69My	1	11	23.1	71	35
155	S Texas Utilities ....	52	1.60	3.1	2.55My	5	13	20.4	63	40
42	S Toledo Edison ....	15	.70	4.7	1.02Ma	—	—	14.7	69	31
16	O Tucson G. E. L. & P. ....	40	1.40	3.5	2.34Ma	16	15	17.1	60	35
129	S Union Elec. of Mo. ....	31	1.52	4.9	1.74Ma	7	7	17.8	90	32
36	O United Illuminating ....	26	1.30	5.0	1.61My	5	2	16.1	81	48
6	O Upper Peninsula Pr. ....	30	1.60	5.3	1.62Ma	D19	8	18.5	99	31
43	S Utah Power & Light ....	30	1.20	4.0	1.78My	NC	8	16.9	67	42
130	S Virginia E. & P. ....	31	1.00	3.2	1.61My	10	15	19.3	62	37
31	S Wash. Water Power ....	41	2.00	4.9	*2.47Ma	6	9	*16.6	81	35
140	S West Penn Elec. ....	32	1.50	4.7	2.21My	6	6	14.5	68	32
77	O West Penn Power ....	51	2.40	4.7	3.35Ma	8	6	15.2	72	36
12	O Western Lt. & Tel. ....	37	2.00	5.4	2.73Ma	D8	7	13.6	73	38
28	O Western Mass. Cos. ....	44	2.20	5.0	3.21Ap	3	8	13.7	69	49
114	S Wisc. Elec. Pr. (Cons.) ..	36	1.60	4.4	2.32Ma	D4	0	15.5	69	36
43	O Wisconsin P. & L. ....	28	1.36	4.9	2.06Ap	6	4	13.6	66	40
40	S Wisconsin P. S. ....	25	1.20	4.8	1.70Ap	D8	5	14.7	70	38
Averages .....				4.6%		4%	7%	16.0	72%	
Foreign Companies										
215	S Amer. & Foreign Pr. ....	15	1.00	6.7	2.10Ma	5	0	7.1	48	44
170	A Brazilian Traction ....	64	.53a	8.2	1.52De	D30	0	4.3	35	75
75	A British Col. Pr. ....	43	1.40	3.3	2.33De	—	15	18.5	60	28
18	A Gatineau Power ....	35	1.50	4.3	2.39De	5	10	14.6	63	33
42	O Mexican L. & P. ....	13	1.00b	7.7	1.96De	17	24	6.6	51	46
14	A Quebec Power ....	31	1.40	4.5	2.17De	8	14	14.3	65	53
63	A Shawinigan Water & Pr. ..	28	.68	2.4	1.48De	5	26	18.9	46	37

\*Deferred taxes resulting from liberalized depreciation are not normalized. If they had been normalized the price-earnings ratio would be higher. \*\*On average shares. D—Decrease. NC—Not comparable. A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. Ja—January; F—February; Ma—March; Ap—April; My—May; Je—June; Jy—July; Au—August; Se—September; Oc—October; N—November; De—December. a—Also 5 per cent stock dividend December 27, 1957. b—Also 5 per cent stock dividend May 1, 1958. c—Also 5 per cent stock dividend March 10, 1958. f—Also stock dividend of one-half per cent quarterly. g—Also 5 per cent stock dividend July 1, 1958.





## What Others Think

### CITA Holds Thirty-ninth Annual Convention

**S**AN FRANCISCO played host to almost six hundred members of the California Independent Telephone Association who attended the thirty-ninth annual convention held at the old and famous Sheraton-Palace hotel from June 4th through June 6th.

An address by J. Curtis Newman, president of the association, brought delegates up to date on CITA events during the 1957-58 term of office. Pointing to the size of the California association, Newman noted that it represents by far the largest number of telephones of any state association in the Union. At the close of 1957 there were 1,173,400 independent stations in service in CITA exchanges. This was an increase of 11.5 per cent over last year.

How much of this increase is due to population growth and how much is due to aggressive sales campaigns is a matter of some disagreement. But there is one point of agreement, Newman said. The promotional activities carried on by the associated Bell companies and the General system, as well as most of the member companies, have paid off in more and better service.

Assuring the delegates that CITA has kept pace with a great dynamic and ever-changing industry, Newman paid tribute to the member companies which

have worked diligently to cope with the problems of an expanding population and a lagging economy. The dial conversion plans of six companies were completed during the past twelve months, he reported, bringing the percentage of independent dial telephones in the state to 98.

"This percentage exceeds those of all other states," Newman said. "One more company established nation-wide DDD [direct distance dialing] and several others are installing equipment to effect conversions in the near future. Our member companies and associate members, the manufacturers and suppliers, have initiated improved methods and equipment to enable all of us to better serve the public."

**T**URNING to the California Public Utilities Commission, Newman said that rate cases before the commission seem to have been given a more realistic approach to rate of return permitted in these cases. In the recent Pacific company case the commission found that an overall rate of return of 6.75 per cent was reasonable, with a 7.7 per cent rate of return on toll business. "I will not say that these are adequate," said Newman, "but at least it is an improvement and I am certain that the public and the commission will have no reason to regret this more realistic approach to a fundamental necessity in pro-

## WHAT OTHERS THINK

viding good telephone service to the public."

**R**OBERT R. GROS, vice president of the Pacific Gas and Electric Company, addressed the convention on "The New California Bonanza." According to Gros, we are no longer in the midst of a recession and, to back up this statement, he said:

Actually, although I finally and reluctantly had to admit that it was indeed a recession, I do not believe we *are* in its midst any longer. There is increasing evidence that the upturn is at hand. Housing starts and interest rates are among the favorable indicators. And, of course, there are still some unfavorable indicators. By and large, though, this has been a crazy type of recession.

Crazy how? Well, crazy in that it came at a time when buying power was so high, for instance. In fact, consumer expenditures for nondurable goods and services have held up quite well—and the significance of this is that in all our major depressions there *has* been a downward spiral of both consumer income and consumer spending.

And it has been a crazy recession in being, I believe, the only one marked by such price rigidity. This is probably unfortunate, overall. Savings are at a very high point—approximately enough cash savings to pay off all home mortgages and consumer debts twice over. . . .

We are not out of the woods yet nor do I think we are going to plunge out of them all of a sudden. None the less, the outward pathway is beginning to take shape as the light starts permeating the forest and we can begin to see our way out. And—if I may be a Pollyanna who always finds some silver lining in each cloud—this recession has generally proved a boon to defensive stocks, a good thing for the securities of your

industry and mine. Do not get me wrong—I do not advocate promoting recession in order to make your and my company's securities rise; but it is one of the few interesting or helpful by-products of this unorthodox recession.

**G**ROS said it is important to look at the manufacturing or retail selling type of industry as indicators of the current economic climate. In this regard, looking beyond the next few months, Gros is more and more impressed with the viewpoint that the next few years may be regarded as a period between booms. He added:

. . . What we are experiencing is the long-deferred end of the post-World War II phase, which got a stay of execution from the Korean War boomlet. So finally we appear to be at the end of a scramble to expand and catch up with deferred wartime demands.

I think it is more than just possible that we have been spoiled by so many "record" years, one after another. We certainly do not have the right to expect that each year will automatically exceed the previous year, and it just may be that even with our best efforts, some years will fall short of those preceding. But this does not excuse us for putting out anything less than our best efforts!

We should remember that in many fields, we have experienced a slackening in the *rate* of increase, not a numerical decrease. And even where there has been a net decrease, maybe we should not knock it too hard. Automobile sales have been disappointing—but they also have sold a terrific lot of automobiles, none the less.

In the next ten years, or twenty years, and on beyond, increases in food, clothing, shelter, consumer goods, telephones by *all* means—increases in

## PUBLIC UTILITIES FORTNIGHTLY

everything—will obviously be called for by a multiplying population. This is the most solid of all bases for genuine optimism.

**B**UT beyond turning out lots more of the same, we will see new *kinds* of frontiers, many of them undreamed of now, Gros continued. He noted that four-fifths of our present economy is based on products that did not exist seventy-five years ago, and the rate seems to be speeding up. Over half of the many workers in electronics in the Los Angeles area are working on items that did not exist just *five* years ago, he said. Talking about California, Gros said:

In the past ten years California has grown twice as fast as Texas, three times as fast as New York; and we are still jumping upward at the rate of 1,500 per day. But even before 1975 California will have become the most populous state. . . .

There are great prospects for all the industries involved with housing as new families are formed at an explosive rate. These new Californians will be furniture buyers, bank customers, appliance users, certainly telephone users. And to a degree that will depend on the broadest, most imaginative kind of salesmanship, *they will be buyers of what they can be educated to buy*. And that applies to telephone services, too.

There are sure to be rough spots in this statistically glorious future, just as there are rough spots now. The easy sellers' market of the earlier postwar years is certainly over. Maybe it will never come back. Competition for the consumer's dollar is getting tougher all the time.

**T**HE way to prosperity is open, but it will call for clear thinking, alertness,

and aggressive selling, Gros emphasized.

"Prosperity," he warned, "won't mean a thing if inflation is not stomped on, hard, even if it hurts. It will hurt a lot worse if we do not. In 1947 I was in China just before the Communist take-over and I recall that it took a briefcase of worthless paper money to buy a meal in a land where the evening newspaper cost me '\$10 million.' Taking the day's receipts to the bank in a dump truck might sound good, off-hand, but it could happen and be unimaginably bad if it means that money has devaluated to the point where we have to value it by the pound. So it is either control inflation or it will control us."

New officers and directors for the 1958-59 CITA term are: J. P. Maguire of Kern Mutual Telephone Company, president; W. Gilman Snyder, The Western Telephone Company, first vice president; Harlan W. Holmwood, General Telephone Company, second vice president; and Neal Hasbrook, secretary and treasurer.

**F**OLLOWING the announcement of the new officers and directors, the chairman of the nominating committee introduced Hugh H. Barnhart, vice president of the United States Independent Telephone Association, who addressed the convention.

Barnhart reviewed briefly several current problems of importance to the industry. With respect to the *radio situation*, Barnhart said:

. . . During the last several years the need for radio microwave to handle particular services has been increasingly required by independent companies, and that is why our association has been very active in representing our companies before the FCC in a sustained effort to see to it that we are not left out in the cold when it comes to the allocation of frequencies, which are

## WHAT OTHERS THINK

going to be so vital to our future operations. Only recently the association, through its able counsel, filed with the FCC in Docket No. 11866 a 51-page brief detailing our requirements and informing the commission how important it is that our companies get their proper share of the radio spectrum.

**A**NOTHER activity which demands the USITA's attention is the tax committee's current campaign for early repeal of federal excise taxes on telephone service. "I am not going to take up your time today detailing the reasons why this unfair and discriminatory tax burden should be removed," said Barnhart. "You know them. You all can help by getting out your pencils and ballpoint pens and writing once again to your Congressmen and Senators, also by *constantly* reminding your subscribers that this tax adds a large sum yearly to their telephone bills. It is suggested that every telephone man approach influential people and organizations in his community, such as heavy long-distance users, editorial writers, local chambers of commerce, and other business organizations, outlining to them why this tax, which has been a yoke around our necks since World War II, should be repealed," he stated.

**B**ARNHART also touched on Bell acquisition of independent telephone property. He continued:

... The general subject of acquisitions in realistically reviewed by Francis X. Welch in his booklet, *Sixty Years of the Independent Telephone Movement*, in which he outlines the stipulations made in the Hall memorandum. This 1922 memorandum by E. K. Hall, then vice president of the American Telephone and Telegraph Company, was followed

by his appearance at USITA's national convention in Chicago at which time Mr. Hall said: "I say without any question or equivocation or hesitation that in our (Bell) judgment, it is to the interest of the two groups, it is in the interests of the industry, and in the interest of the public that there should continue to be two strong powerful groups in the industry." Mr. Welch reminds us: "It was not only a declaration of a 'live-and-let-live' attitude, but a virtual admission that the continued existence of a strong and prosperous independent industry was in the interest of the Bell system. Both branches needed each other in order to render a full measure of service to the public."

Another subject which always claims USITA attention is that of toll compensation. According to Barnhart, many independent companies definitely are still of the opinion that they are being inadequately compensated for their service on interchanged toll business. "Certainly our Bell friends do not expect independent telephone companies to subsidize the interchanged business," he said. "They, too, are reasonable men. But on the other hand, the testimony shows that some Bell companies are dragging their feet to the detriment of the independent companies. Our independent companies must recognize, of course, that Bell associated companies have to have *facts* upon which to predicate authorization of increased compensation. At the same time I am sure our Bell system friends need to adopt a more sympathetic and realistic attitude in some cases," he remarked.

**O**N the subject of what rate independent companies should receive on their property devoted to interchanged business, it is generally agreed that in a small enterprise where the risks are greater, the rate



## PUBLIC UTILITIES FORTNIGHTLY

of return must be larger, Barnhart observed. He continued:

... The Bell system in rate cases before regulatory commissions maintains that its overall rate of return should be somewhere between  $6\frac{1}{2}$  to  $7\frac{1}{2}$  per cent. On this score among various others it does seem to us that greater liberality could be manifested by our Bell system friends in arriving at a satisfactory level of toll compensation on interchanged business to independent companies. In these matters, sight must not be lost of the fact that the Bell and independents together are engaged in a great common enterprise; that there must continue to be sound relationships between them; that there must continue to be mutual confidence and respect. We must continue to assume also that on toll compensation matters as well as on other common problems, a common solution can be reached by reasonable minds when they sit down together around the conference table.

**D**URING the remainder of this year 1958, USITA will continue to concern itself with other problems affecting the industry, including legislation, Barnhart continued. Measures which will bear watching this year include bills to extend coverage of the wage-hour, bills to increase the minimum wage, bills to increase the REA interest rate, bills to regulate over-the-counter security transactions, etc.

Barnhart suggested that USITA's job would be measurably aided by an increase in membership. "Every independent company should belong not only to its state association but to the national association as well. In fact, their interests today and their problems practically demand it," he stated.

He noted that of the 58 independent

companies in this state, only 27, or 47 per cent, are affiliated with the USITA. There are 31 companies in the state of California which are not members of the national association. Barnhart then commented:

... Permit me to express the view that they should be. They should be sharing their proportion of the legitimate cost of the operation of the trade organization that is fighting their battles in the national arena. There are many reasons why I say this. First, take the matter of toll compensation. In 1956, independent companies received from the Bell system \$165 million. And while the figures are not available yet it is expected that 1957 totals will show a substantial increase over the 1956 total of \$165 million. A substantial part of the increase over the past twenty-three years has been directly attributable to the work done by our association's toll compensation committee, and more recently with the assistance of our full-time toll engineer. A substantial proportion of these toll compensation increases went to your California companies.

**B**ARNHART especially invites REA borrowers, both commercial and co-operative companies, to affiliate with the voice of the independent telephone industry. It was with the interests of these companies in mind that USITA President Haas recently appointed a special committee to promulgate plans which will encourage other REA borrowers to become associated with the national association and with their respective state telephone associations; to study all national legislation affecting REA telephone borrowers and where appropriate to recommend a course of action; to consider all telephone problems which are peculiar to REA telephone



## WHAT OTHERS THINK

borrowers; to provide a committee program at the USITA convention of particular interest to REA borrowers; and to act as a liaison between REA borrowers and the USITA board of directors, so as to keep the board informed of matters of interest and to make recommendations for board action as are appropriate.

**"T**HE old saying that there is strength in unity is a bit trite, but it is just

as true today as it ever was. The more companies affiliated with USITA the more effective will the association be in representing the interests of the industry in the forefront of national affairs. With the financial and moral support of more companies, USITA will be in a stronger position than ever before to help the independent telephone industry take the 'Forward Look,'" Barnhart stated in conclusion.

## Rate Conditions in Natural Gas Certificates

**I**N the wake of the decision of the third circuit court of appeals in the CATCO case, regarding the authority of the Federal Power Commission to impose initial rate conditions in a certificate proceeding under § 7 (e) of the Natural Gas Act, the views of Henry F. Lippitt, 2nd, outlined in an address to the Federal Power Bar Association prior to the third circuit decision, are of timely interest. The address, excerpts from which appear below, express the opinions of Mr. Lippitt and not those of Southern California Gas Company, with which he is associated:

"At present, the FPC has in its locker a regulatory tool which it uses sparingly. Yet, the use of this tool by the commission might make a 'giant step' forward in the regulation of independent producers—along the lines suggested in the current Harris-O'Hara Bill. The commission's reluctance to use this regulatory tool today has made the commission the subject of litigation brought by a number of distribution companies and their consumer representatives.

"This powerful regulatory tool, conferred specially on the commission by Congress in 1942, is, of course, the commission's authority under § 7(e) of the

Natural Gas Act to impose initial rate and other conditions on the new service certificates of convenience and necessity which it issues to natural gas companies—including independent producers—under the commission's jurisdiction."

**S**ECTION 7(e) of the Natural Gas Act provides that:

The commission shall have the power to attach to the issuance of the certificate and to the exercise of the rights thereunder such reasonable terms and conditions as the public convenience and necessity may require.

At the time the bill, which later became § 7(e) of the act, was before the House, the House committee stated (H Rep 1290, 77th Congress, first session, pp. 2, 3 (1941)):

The bill when enacted will have the effect of giving the commission an opportunity to scrutinize the financial setup, the adequacy of the gas reserves, the feasibility and adequacy of the proposed services, and the *characteristics of the rate structure* in connection with the proposed construction or extension *at a time when such initial matters can*

## PUBLIC UTILITIES FORTNIGHTLY

*readily be modified* as the public interest may demand.

The Senate report echoed these sentiments and the bill, as reported, was passed without amendment. Thus, the statutory foundation was laid for what the commission termed "complete regulatory control through the instrumentality of the certificate of public convenience and necessity."

Based on this authority, the commission for many years consistently recognized and employed the power to attach rate conditions to the certificates which it issued to natural gas pipeline transmission companies. In its 1949 annual report the commission listed five pages of cases under the heading of "Prevention of Rate Schedule Inequities for New Pipelines and Service," saying:

Any evident departure from the statutory requirements and established practices with respect to rates requires conditioning any certificate granted so that compliance with the rate conditions of the law may be effected. Such preventive action, timely taken, thus may avoid the need for formal rate proceedings immediately after a natural gas pipeline starts operations or commences new services.

**I**N its thirty-third annual report to Congress in 1953 the commission showed the extent of its activity in this field, saying:

During the fiscal year, 229 certificate applications were completed. Fifty-two of the certificates issued contained rate conditions. In addition, 24 rate conditions attached to previously issued certificates remained unsatisfied at the beginning of the year. During the year, 37 rate conditions were satisfied or disposed of. At the end of the year, a total

of 39 rate conditions were outstanding.

A selection of the certificates so issued showed these various conditions were detailed and effective. (Citations omitted.) The commission's authority in these decisions was consistently upheld by the courts. (Citations omitted.)

To date, the commission has moved cautiously in applying this regulatory tool to independent producers under its jurisdiction. Mr. Lippitt said of this:

"After the Phillips case the first independent producer cases set for hearings after the commission's famous Order 174 series were mainly certificate proceedings. These producer certificate cases fell into one of two classifications, those based on contracts in effect before the Phillips decision, and those based on contracts made after the Phillips decision. Not knowing what pattern the commission would follow and not wishing to be held to have waived their objections to the price and price escalation clauses in these contracts, many distributors sought to intervene in all of such of these early producer certificate cases as directly affected their own pipeline suppliers. . . ."

**T**HE commission, he said, determined to side-step the issue. Without taking any direct action with respect to the objectionable clauses, the commission included in its certificate orders a paragraph providing, in effect, that the granting of the certificate was not a waiver of the provisions requiring the filing of any change in rates, was not an approval of the rates, and was without prejudice to any future proceeding relating to the applicant's rates or rate provisions. Relying on this provision the commission first rejected the distributors' argument in producer certificate cases based on pre-Phillips decision contracts (Re Lexia Buchanan, Docket No. G-3864, order issued July

## WHAT OTHERS THINK

1, 1955) and finally in certificate cases based on producer contracts made subsequent to the Phillips decision (Re Lenoir M. Josely, Inc., Docket No. G-8709, order issued September 3, 1955).

This point of view was confirmed by the commission's decision in the Tamborello case (Re Anthony J. Tamborello et al. (1955) 11 PUR3d 411 affirmed on rehearing (1956) 15 FPC 1). There the commission refused to condition the producer's certificate for initial service to Transcontinental Gas Pipe Line Corporation, saying that "the estimated dollar increase in Transcontinental's cost of service on an incremental basis . . . is negligible, slightly in excess of one per cent" (11 PUR3d at p. 417).

On June 28, 1955, a presiding examiner's initial decision had been issued granting a certificate to Signal Oil & Gas Company to sell gas to Cities Service Gas Company. At the request of Oklahoma Natural Gas Company, Lone Star Gas Company, and commission staff counsel—all of whom represented parties who would be affected by any increase in gas prices—the certificate was conditioned on a 10-cent per Mcf price.

A divided commission affirmed the examiner. Mr. Lippitt then stated:

**"As** one of the distributor spokesmen put it 'the haze surrounding the status of what [would] be considered in producer certificate cases [became] somewhat thicker as a result of the commission's decisions.'

"Two court decisions helped pierce the haze—pointing out that the full answer to the problem lay in the exercise of the commission's discretion:

In *Sunray Mid-Continent Oil Co. v. Federal Power Commission* (1956) 239 F2d 97, 100, 101, Judge Lewis said:

"The statutes should be liberally con-

strued to accomplish this purpose and the determination of the commission as to when to impose and what constitutes a reasonable term or condition should not be upset by this court unless a clear abuse of discretion appears. . . .

*"Just as the commission has authority to impose conditions upon the issuance of a certificate so, too, it has authority to refuse to impose conditions."* (Emphasis supplied.)

"The next decision affirmed the commission in its imposition of the rate condition on Signal, the court, saying that the commission's action was 'clearly within its statutory authority.' The Supreme Court denied certiorari (*Signal Oil & Gas Co. v. Federal Power Commission* (1956) 238 F2d 771, certiorari denied (1957) 353 US 923)," he continued.

**A**RMED with this court authority, the next time the question came up, the presiding examiner's decision was reversed and a certificate was issued to purchase gas without any initial rate condition (Re *Natural Gas Pipeline Co. et al.* (1956) 16 FPC 80-100 (1957) 17 FPC 67, 68, 85). Lippitt stated:

"The aggrieved intervenor, Oklahoma Natural Gas Company [took], the commission to court over its refusal to impose the rate condition in this instance. . . .

"Since this time, the question has risen collaterally once, and directly once. In each instance the commission refused to impose any rate condition. Each time it has been taken to court for its refusal to impose any condition.

"The collateral case concerns the Texas-Florida pipeline. In order to secure a pipeline certificate in that case, the producers selling to the line had to back off on their initial price by 2 cents per Mcf (Re *Houston Texas Gas & Oil Corp. et*

## PUBLIC UTILITIES FORTNIGHTLY

al. (1956) 16 FPC 118, rehearing denied (1957) 17 FPC 303).

"The commission's action in issuing this certificate without any rate condition was affirmed by a sharply divided court of appeals (Bazelon, dissenting) and an appeal to the Supreme Court is under way. [The Supreme Court subsequently denied certiorari.]

"The direct case now before the courts is, of course, the celebrated 'CATCO' case, involving sales to Tennessee Gas Transmission Company from the Louisiana offshore properties of Continental Oil Company, Atlantic Refining Company, Cities Service Production Company, and Tidewater Oil Company. The proposed initial price of 22.4 cents per Mcf is higher than Tennessee was paying under any other contract and a united front, consisting of the New York Public Service Commission and a number of distribution company interveners on the eastern seaboard, appealed to the court of appeals for the third circuit from the commission's refusal to condition the independent producer certificates to an 18-cent level (including one cent per Mcf gathering tax) . . .

"Since in that case the commission refused to impose the 18-cent per Mcf rate condition in the certificates, the outcome of the case will furnish an important guide to future action. . . ."

**A**s Commissioner Connole said in his dissenting opinion (17 FPC 884, 886, 887):

In my opinion, the consequences of abandoning our position will be more serious than their effect on this particular sale. Whether by design or accident, the issues in this proceeding now transcend the close limits of the original hearing. At stake is the question whether the commission should hold a

position which it has determined is in the long run public interest, or whether it should abandon it when confronted with allegations that short run injury to one segment of the industry and consumers might result. Where the issue is reduced to this simple statement, the answer is clear. . . .

As concerned as I am for Tennessee's customers, I am more concerned for the whole body of consumers on all transmission pipelines for whose protection we are responsible . . .

On balance, and in view of the expansion of the issues beyond those originally contemplated by this docket, I believe it more important to the public interest to preserve the commission's authority to make lawful and necessary orders than it is to preserve these contracts as written. The right to maintain valid orders against allegations of urgency, the importance to the consumer of the Signal Oil doctrine and the right of all consumers for protection against unreasonable initial rates outweigh the potential damage to the consumers of Tennessee Gas Transmission which might flow from maintaining the position I urge here.

**O**N March 31, 1958, the commission issued its opinion and order in the Seaboard Oil case (Re Seaboard Oil Co. et al. Docket Nos. G-11970 et al. Opinion No. 309). Certificates were issued covering sales at an initial price of 19½ cents per Mcf (including one-cent tax reimbursement) in Vermilion and Lafayette parishes, Louisiana. The commission denied the staff's request for a rate condition fixing the initial price at 18 cents per Mcf. The presiding examiner had refused to attach such a condition, and the staff had filed exceptions to this ruling. Lippitt continued:

"First, it may be noted that this was a



## WHAT OTHERS THINK

case in which there were no opposition interveners. Second, the commission took the occasion to state its policy. Chairman Kuykendall filed a short opinion 'concurring in the result.' Commissioner Stueck concurred 'in principle' but stated that 'I do not agree entirely with all of the reasoning and all of the verbiage contained in the majority opinion.' Commissioner Connable dissented at length.

"The majority opinion concluded that there was 'a complete lack of evidence in the case' to support the contention that a rate condition should be imposed—discussing and dismissing possible triggering effects 'on the gas price structure' and the de minimis effect on ultimate consumers when mixed with existing supplies of gas. As to the impact of the proposed rate on the gas price structure, the majority stated that the independent producer applicants have no burden of going forward to produce affirmative evidence.

"Chairman Kuykendall concludes his concurring opinion with the comment that: 'I agree with all my colleagues that the high initial prices contained in some contracts are a matter of grave concern to us, and we will use any lawful and practicable means available to reduce excessive prices.'"

THE commission's point of view was reiterated in *Re Hope Natural Gas Co. et al.* issued March 31, 1958. There the commission issued a certificate to various independent producers for initial sale in Randolph county, West Virginia, at 27 cents per Mcf, a price 7.8 cents per Mcf higher than the prevailing producer prices in the county. In so doing, the majority stated that if the applicant proves there is market for the gas at the proposed price and that the project is economically feasible at the proposed price it has sustained its burden of going for-

ward with the evidence, and a certificate should issue to it. Lippitt added:

"Based on this pronouncement, it is clear that the next move is up to distribution company and consumer representatives to present appropriate evidence in forthcoming hearings, along the line of the definitive field price evidence presented in the Signal case.

"The opposition on the part of the independent producers to the acceptance of conditions prescribing lower initial rates in certificate cases is predicated largely on the 'bird in the hand is worth two in the bush' theory coupled with—until recently—the hope that help would arrive in the form of the current Harris-O'Hara Bill ... with its 'reasonable market price' standard. The 'bird in the hand' is the higher prices the independent producers are now securing for their sales while § 4 and § 5 proceedings continue in an effort to determine the basis upon which independent producers may be regulated under the Natural Gas Act as it now stands.

"THE quid pro quo for this immediate and continued pressure on the part of independent producers for higher prices is the series of rate investigations which the commission has initiated under pressure from outside sources ('Tennessee Complaint Cases,' orders issued January 27, 1956, *Re Chicago Corp. et al.* 15 FPC 1047, 1078), and which the commission has issued as a result of the CATCO proceedings (*Re Cities Service Production Co.* (1957) 17 FPC 889). In the meantime, of course, the higher rates continue to be collected, and are not subject to refund.

"The way out of this dilemma is beginning to be shown. While it has been an open secret around Washington for some time that the commissioners have had a confidential staff field price study which



## PUBLIC UTILITIES FORTNIGHTLY

the commission has consistently used as a basis upon which to determine whether or not to suspend independent producer rate increases, the existence of this study has just been officially revealed. In the recent order Re Reef Fields Gasoline Corp. (operator), Docket No. G-14030, order issued March 18, 1958, the commission reviewed its prior suspension of a rate increase from 9.1215 cents per Mcf to 10.135 cents per Mcf in the Permian basin, saying:

Reviewing our practices and policies with respect to changes in rate schedules tendered by independent producers engaged in the production and sale in interstate commerce of natural gas in the Permian basin . . . we conclude now that it would be inequitable, unfair, and unduly discriminatory to respond to continue the suspension of the rate increase sought. Mindful of our responsibility to treat those similarly situated with equality consonant in the premises, we think it is proper and in the public interest that we, upon our own motion, vacate the suspension, accept the rate change for filing, and terminate this proceeding.

A short time after the issuance of the suspension order in this proceeding [December 26, 1957], we decided, as a matter of administrative policy, to accept for filing rate changes tendered for the sale of natural gas produced in the Permian basin as long as such changes did not exceed a basic rate of 10 cents per Mcf. By such policy we do not mean to imply that a 10-cent per Mcf rate in the basin is just and reasonable. Section 154.101 of our regulations under the Natural Gas Act (18 CFR 154.101) specifically provides that acceptance of a change in rate is not to be construed as approval by the

commission of the rate change tendered. Rates thus accepted are subject, at all times, to review under the powers conferred upon the commission by § 5(a) of the Natural Gas Act.

**"T**HIS is the first opening in the door. The producers' 'Omnibus' field study is another—with its showing of regional field price evidence," Lippitt said.

Based on such a study, made known to everyone, the commission could properly announce that

First, no initial rate filings would be allowed within the upper quintile; *i.e.*, all new initial rate filings would be limited to not in excess of the amounts stated in cents per Mcf (certificate rate conditions).

Second, rate investigations would be undertaken only for any contracts in the upper middle quintile (§ 5(a) investigations).

Third, any rate increases moving into the upper middle quintile would be suspended and made the subject of a rate proceeding (§ 4(e) investigation).

Fourth, all proceedings as to any rates in the middle quintile or below (or below the weighted average field price) would be dismissed without refund, and the proceedings terminated.

The benefits of this would be severalfold. It would prevent, or at least tend to prevent, the "leapfrogging" of prices which is so objectionable to distributors and consumers. It would hold prices in line for the time being. It would immediately remove several hundred of the 1,162 producer rate increases now suspended and subject to hearing before the commission. It would further concentrate the commission's attention on price increases in the critical area where attention was required.

# The March of Events



## Suggests Gas Commission

**A**N international gas commission has been suggested by Oakah L. Jones, general manager of Consumers Gas Company, Toronto, Canada. He made the recommendation to the Royal (Borden) Commission on Energy Resources. Jones said that the international commission could consider the establishment of a system for the export or import of gas on some "unit" basis related to the similar handling of oil, coal, electricity, and water. He said the commission could also weigh the possible long-term effect of the export of natural gas in frozen, compressed, or other forms.

The international gas commission would consist of Canada and the United States.

## Atomic Alliance Sought

**E**NGLISH ELECTRIC, LTD., which is now building the world's largest nuclear power station as a member of a 3-company group in England, is eager to acquire an American firm as a partner. Dr. H. S. Arms, chief engineer of the company's atomic power division, said greater collaboration is needed in development of nuclear power between the United States and the United Kingdom. His company would like to benefit by American "know-how." (See, also, page 177.)

The British power station, located at Hinkley Point, will generate 500,000 kilowatts when completed at an estimated cost of 7.6 mills per kilowatt-hour. The plant will be of the natural uranium, low-pressure, gas-cooled type.

## Arkansas

### PUC Approves Gas System

**T**HE Arkansas commission has approved plans of the Arkansas Louisiana Gas Company and the cities of Tupelo, Patterson, and McCrory in north-east Arkansas to construct a natural gas distribution system. The cost is estimated at \$574,500.

The system will be financed by sale of

revenue bonds and by leasing the transmission lines to Arkansas Louisiana for twenty-five years. Eventually Arkansas Louisiana may buy the system. Under the plan contained in the application filed with the commission, the proposed line would extend from the Texas Eastern Transmission Corporation line near Erwin (Jackson county) to the three cities.

## PUBLIC UTILITIES FORTNIGHTLY

### California

#### Electric Rates Cut

**L**OS ANGELES electric consumers have received another windfall with the fifth successive reduction in their electric bills in less than a year. Rates have been lowered to 1956 basic levels, the water and power commission reports. According to J. C. Moller, Jr., president of the commission, these savings have been passed along to the people of Los Angeles because power production costs have dropped by \$6 million annually. Under the fuel adjustment clause formula, which is an escalator formula approved by city council last year, customers' bills go up or down according to what it costs the department to operate its power plants.

The reason the commission has been able to lower its charges, despite generally higher costs, is because of increased supplies of low-cost Hoover dam power in addition to savings in fuel oil purchases and higher operating efficiencies.

#### PG&E's \$9.5 Million Gas Hike

**T**HE Pacific Gas and Electric Company has been granted a \$9.5 million annual rate increase by the California Public Utilities Commission, effective August 1st. Northern and central California customers, numbering 1.5 million,

will be affected by the change. Originally the company had sought an increase of \$18 million, or 7.7 per cent over the existing rates. It had also asked permission to "normalize" its federal income tax payments for rate purposes while taking advantage of accelerated depreciation. However, the commission deferred this matter until later when it said it would schedule a public hearing and investigation of the subject of tax treatment of accelerated depreciation and amortization. The rate increase granted Pacific Gas and Electric, according to the commission, would bring the utility's gas department rate of return to 6.52 per cent.

#### Gas Pipeline Contemplated

**T**HE Southern Counties Gas Company of Los Angeles has asked the California Public Utilities Commission for authority to construct 20 miles of 24-inch diameter natural gas pipeline in Riverside county, which will be used to deliver gas to San Diego Gas & Electric Company. Estimated cost of the line will be more than \$1.8 million. The pipeline will parallel a portion of an existing company pipeline and should boost gas delivery through that system from the present daily capacity of 116 million cubic feet to 129 million cubic feet.

### Kansas

#### Revised Phone Rates

**L**AST September Southwestern Bell Telephone Company proposed a Kansas City metropolitan area plan which would raise rates on one-party residential phones 50 cents a month. Under this plan business phones also would have received increases of 50 cents a month. Two-party lines would have paid an additional 25 cents a month and four-party lines would be

charged 10 cents more monthly. Two city specialists, Frank O. Knight, associate city counselor, and A. M. Schumacher, utilities engineer, have advanced a plan that would place a bigger rate increase on business connections and would mean a smaller increase for residential subscribers. They proposed that residential rates be increased only 10 cents for one-party lines, but \$1.20 for business connections, 30 cents for two-party lines, and 15 cents

## THE MARCH OF EVENTS

for four-party lines. They favored a plan to eliminate most toll charges. The plan would lose about \$986,200 for the company in toll charges and \$1,191,380 in

new plant and added facilities would be required. The city's report said, in view of these facts, the rate increases are obviously needed.

### Maryland

#### Rate of Return Upped

**B**ECAUSE it had been losing prestige in the eyes of investors due to the deterioration of its financial position, the Baltimore Gas & Electric Company was authorized to raise its rates on gas, steam, and electric service by more than \$9 million annually.

The Maryland Public Service Commission, after thorough analysis of the company's fiscal status, approved an increase in the company's authorized rate of re-

turn from 6 to 6.25 per cent. However, return for the past twelve years has averaged only 5.35 per cent.

Although the increase in gas and steam rates was granted as asked, the hike in electric rates was pared by \$700,000. A new schedule of electric rates has been asked for by the commission to comply with the limitation upon the rate of return. In order to give the company the raise in electric rates which it had asked for, the commission said it would have had to up the rate of return to 6.5 per cent.

### Montana

#### Rate Boost Pared \$357,681

**T**HE Montana Power Company was denied a 19 per cent increase in electric rates by the state public service commission on grounds that the request was discriminatory to household users. It did authorize, however, a 12 per cent increase in residential, commercial, street lighting, and housing authority rates. The increase will amount to 85 cents a month for the average household user, according to the commission. The utility's proposal would have increased residential rates \$1.47 a

month. However, the commission states that the new rates are actually lower than those charged in 1941. The monthly bill for 300 kilowatt-hours will be \$8.18 for a residential user, compared with \$8.36 in 1941.

In a unanimous 30-page order the commission said the modified rates would allow the company to earn a rate of return of 5.33 per cent. This is less than the 5.56 per cent return which the commission held was reasonable for the Mountain States Telephone & Telegraph Company in refusing its application for higher rates.

### Rhode Island

#### Rate Hike Appeal Denied

**T**HE state supreme court has rejected an appeal of the Narragansett Electric Company from the decision of the public utility administrator of last September which denied its application for a rate increase. The opinion was written by Chief Justice Francis B. Condon. It upheld Public Utility Administrator George

A. McLaughlin, who said that 5.84 per cent was a fair return for the company on the basis of its intrastate rate base. The company had asked for an average rate increase of 9.4 per cent.

The opinion directed the administrator to amend another order so as to permit billing by the company every two months instead of monthly as at present.

## PUBLIC UTILITIES FORTNIGHTLY

### Utah

#### Tax Cut for Co-ops Killed

It has been ruled by the Utah attorney general that two state laws which limited tax assessments on co-operative telephone and power companies are constitutionally invalid. Three telephone co-operatives and seven power co-operatives are involved. When an assessment was made against an office building of the Moon Lake Electric Association, Inc., the action was in contravention of a law that limits assessment on such co-operatives to not more than \$50 for each mile of primary transmission line. Under the law, all

property other than transmission lines is exempt. Other types of co-operatives do not receive similar exemptions.

The opinion ruled the laws violated a Utah constitutional requirement for a "uniform and equal rate of assessment and taxation." Moreover, the opinion stated that the laws gave certain co-operatives favored treatment, specifically those under the federal Rural Electrification Act of 1936. The more controversial issue of whether the laws were unconstitutional because of giving favored treatment to co-ops over private companies was not taken up.

### Virginia

#### Utility Taxes Boosted

Tax assessments of public utilities in Virginia increased \$62,854,545 over 1957, according to the state corporation commission's director of public service taxation division, J. C. Masten. This is the largest one-year increase ever reported in the state. It is supposed to reflect a high rate of construction of new utility facilities and an appreciation in land values.

The total of tentative assessments was put at \$622,985,121 for the 1958 tax year. This compares with \$560,040,576 last year.

Applying the traditional method of assessing at 40 per cent of market value in each city and county, the tax yield, based on an average tax rate of \$3 per \$100 assessment, would amount to \$18,856,000, which is an increase of \$2,056,000 over the yield for all localities in 1957.

### West Virginia

#### Oil, Gas Revival?

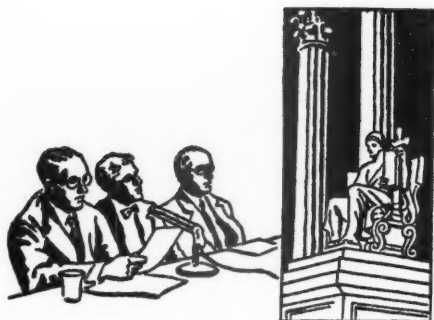
THERE is a resurgence of oil and gas drilling activities in the Appalachian area of West Virginia, according to Governor Underwood. In a speech at a mid-year meeting of the Interstate Oil Compact Commission at Salt Lake City, Underwood said that while oil and gas drilling throughout the country is off about 35 per cent from two years ago, West Virginia is doing more drilling now than it was then.

This resurgence in drilling is taking place in a section of the country which

was written off many years ago as depleted and washed up, Governor Underwood declared.

The governor claimed, however, that actually 75 per cent of the already known oil reserves of this area are still in the ground, and that new, secondary recovery processes make at least a substantial portion of the reserves recoverable at an economic cost. Best evidence that this part of the country still has enormous oil and gas potentials, he said, is the number of wildcatters who have been coming back within the last year or so.





## Progress of Regulation

### *Trends and Topics*

#### Contract Limitation on Right to Fair Return

THE right of a public utility company to demand a fair and nonconfiscatory rate of return may, under some circumstances, be waived. A binding agreement to render service at specified rates has in some cases barred a rate increase. Commissions have authority to increase contract rates producing a low return, but it has been held that they are not under compulsion to do so.

This was the view of a federal court in a recent case in which it reviewed an order of the Federal Power Commission. The court said that although the commission may not normally impose a rate affording less than a fair return, it does not follow that the commission is required to relieve a company of an improvident bargain which affords less than a fair return (23 PUR3d 298). Reference was made to the Supreme Court decision in the *Sierra Pacific* case.

The Supreme Court, in the *Sierra Pacific* case, said that while the commission had undoubted power to prescribe a change in contract rates whenever it determines such rates to be unlawful, and while the commission may not normally impose upon a public utility a rate which would produce less than a fair return, it does not follow that the public utility may not itself agree by contract to a rate affording less than a fair return or that, if it does so, it is entitled to be relieved of its improvident bargain. The court cited the earlier decision in the *Arkansas Natural Gas Company* case (PUR1923C 714) and it said that in such circumstances the sole concern of the commission would seem to be whether the rate is so low as to adversely affect the public interest (12 PUR3d 122).

Back in the days of World War I the Supreme Court upheld the refusal of a city to permit higher street railway fares although the company's operating costs had increased because of war conditions. There was no showing that the contracts had become impossible of performance. The company sought the aid of a court of equity to "avoid contracts duly made and entered into while the same are yet in force." This was a case of a hard bargain, but the court said equity does not relieve from hard bargains simply because they are such (PUR1919D 239, 248).

## PUBLIC UTILITIES FORTNIGHTLY

In New York the rule was stated that the courts will not relieve a utility from its obligation to serve at rates agreed upon in a valid contract however inadequate such rates might be. Enforcement of rates fixed by contract cannot be restrained on grounds of unconstitutional confiscation (PUR1931E 161). Where there is a contract between a town and a public utility company as to electric rates, said the New Mexico supreme court, the fact that the rate had become noncompensatory is no defense to the enforcement of the contract (PUR1924E 168). The Florida supreme court said that where public service corporations and the governmental agencies dealing with them have power to contract as to rates, and exert that power by fixing contract rates, the enforcement of such rates is controlled by the obligation resulting from the contract, and, therefore, the question of whether such rates are confiscatory becomes immaterial (PUR1924C 428).

### *Support for Right to Demand Higher Rates*

Increases in contract rates have often been granted as a matter of public necessity. A company facing bankruptcy or unable to finance service improvement cannot fulfill the needs of its customers. In a few cases where this situation has arisen there have been statements carrying the implication that higher rates may be demanded.

The North Dakota commission increased rates for certain services rendered by an electric company under contracts. Discrimination against other customers, according to the commission, would otherwise exist. The commission said that a rate established for a term or period of years may have been reasonable at its inception, whereas some time later and before the expiration of the contract period, the rate contracted for, because of unusual conditions that could not be foreseen at the time the contract was entered into, might be essentially "confiscatory and unreasonable." Notwithstanding the inviolability of contracts, the commission continued, confiscatory contract rates could not be enforced (PUR1921A 1). The same views were expressed in a case where an emergency increase in electric rates was granted to Northern States Power Company. The commission not only asserted authority to change contract rates, but said that "notwithstanding the inviolability of contracts there is little question but that confiscatory rates resulting in the taking of property without just compensation may not be administered under a time contract" (PUR1921A 121, 128).

The Pennsylvania commission said that rates fixed in a franchise contract may and "must" be disregarded under the police power of the state whenever it is made to appear that they are unjust and unreasonable or unjustly discriminatory or that their enforcement would work confiscation of the utility's property used in its service (PUR1924B 400). The South Dakota supreme court ruled that there was no abuse of discretion in the action of a trial court in dissolving an injunction against the charging of rates in excess of the maximum fixed in a franchise when there was undisputed evidence that the franchise rates were unreasonable and confiscatory (PUR1923E 97).

## *Review of Current Cases*

### **Allowance for Attrition Denied Telephone Company**

THE Maine commission denied a telephone company's request to allow for attrition in fixing the return allowance. The commission had authorized a modified rate increase which would result in a return of 6 per cent. Claiming a depressing effect on such return caused by inflation, the company had broken down attrition into two elements. First, there was the effect of negotiated wage increases. And, second, there was the increased level of average investment per station which resulted from new plant constructed at current and recent price levels which were in excess of those represented by the pre-existing older plant.

In regard to attrition caused by wage increases, the commission was of the opinion that it could not properly fix rates on any basis other than the existing wage level, except perhaps in case of an irrevocable commitment by the company to make a definite wage increase at some specific future date. If the commission acceded to the company's request, its policy of testing rates for the future upon the basis of actual operating experience over a representative period of time and adjusting that experience for changes that appeared definite and certain would be violated. Furthermore, such action would involve the commission in wage-fixing policies of the company, which might be interpreted as concurrence in a system of annual wage increases.

As for attrition related to investment increase, the commission concluded that allowance of such an amount would be rate making based on speculation and conjecture. In addition, the commission held that the company had used an erroneous arithmetical method in applying its figures to the 1958 forecast of attrition due to in-

vestment increase. It had related the diminishing rate of return to the dollars of growth in average investment per station, rather than to the percentage growth of investment per station. Consequently, the attrition forecast for conditions of 1958 had been exaggerated.

#### *Expense Adjustments*

The commission excluded an amount claimed by the company for a fair value study of its intrastate properties. This study had subsequently proved unnecessary when the legislature had changed the statute, and current value evidence of plant properties no longer was of concern in rate proceedings. The commission did not believe it would be fair and reasonable to charge such a nonrecurrent expense to future rate-paying customers. Also, although much of the expense was derived from the wages of personnel normally assigned to other duties, the company had carried on its usual operations, with no diminution of efficiency and without difficulty while the study was in progress.

The commission allowed as an operating expense the cost of a wage increase that had been negotiated subsequent to the test year of 1957. Granting a wage increase at such a time in the light of the recessed condition of the nation and the state, said the commission, was a decision which management had made, and which resulted in a cost which would not be disturbed for rate-making purposes in the absence of any positive evidence of an abuse of discretion.

Charitable contributions were excluded, the commission commenting that the amounts should be charged to the stockholders. Similarly, interest on customers' deposits was excluded.

## PUBLIC UTILITIES FORTNIGHTLY

### *Accelerated Depreciation*

The company had not elected to take advantage of liberalized depreciation afforded by § 167 of the Federal Revenue Act of 1954, although the commission was of the opinion that the use of liberalized depreciation would result in permanent tax savings rather than merely a tax deferral which, if used by a utility, should be passed on to consumers in the form of lower rates. The company had offered as its principal reasons for not adopting liberalized depreciation the fact that the accounting therefor was difficult in the case of small units and that it anticipated

a repeal of the federal enabling statute.

This may be a matter primarily of management, commented the commission, but it would seem that if the company is fairly able to make any savings in expenses which would result in lower rates to its customers, it would have the responsibility for doing so. In this proceeding, however, in the light of the fact that the company had not chosen to adopt the liberalized method and in the light of the current paucity of judicial precedents, the commission allowed as an expense the taxes actually paid. *Re New England Teleph. & Teleg. Co. FC No. 1535, April 30, 1958.*



### Motion to Disqualify Examiner Denied

THE California commission denied a motion to disqualify an examiner as a hearing officer in an electric rate proceeding. The examiner was alleged to be biased and prejudiced to the rights of a city and the company's consumers owing to the fact that, as a member of the commission's staff several years previously, he had testified on gas rate zones.

The examiner's function in a proceeding is to assist the presiding commissioner

in taking evidence and developing an adequate record which is ultimately given to the commission. The responsibility for preparing the final draft of the decision, signing the decision, and the ultimate legal responsibility for the decision rests upon the shoulders of the presiding commissioner and his four fellow commissioners. *Re San Diego Gas & E. Co. Decision No. 56498, Application Nos. 39679 et al. April 8, 1958.*



### Telephone Rates Increased in Face of Service Complaints

ALTHOUGH the United Telephone Company of the Carolinas, Inc., has had no effective rate increase since 1930, the North Carolina commission denied most of the additional revenues sought by the company. The commission authorized rates sufficient to increase gross revenues by \$104,000 annually, finding that this amount would result in a rate of return of 6 per cent on a fair value rate base of \$3 million. The new rates requested by the company would have afforded a return of

nearly 8 per cent on an investment rate base, according to the commission staff.

The commission found a fair value rate base about midway between the estimates of the company and those of the commission staff. In making this valuation, the commission took into account the age of the property and the fact that 94 per cent of the plant has been constructed since 1950. It also considered original cost, together with depreciation and the company's estimate of fair value.

## PROGRESS OF REGULATION

In arriving at a reasonable rate of return, the commission evaluated the company's capital obligations. Net operating income must be sufficient to pay interest on bonded indebtedness, provide reasonable dividends on equity capital, and afford reasonable additions to surplus.

### *Service Improvement Reports*

Despite large plant additions in recent years, following a show-cause proceeding looking to an improvement in service, there was still substantial customer dis-

satisfaction with the quality of service in several exchanges.

Quoting other authorities, the North Carolina commission recognized that quality of service is a proper consideration in rate making. While it did not condition the rate increase on service improvement, it found that the company should improve service in a number of exchanges and ordered the submission of monthly progress reports. *Re United Teleph. Co. of the Carolinas, Inc. Docket No. P-9, Sub 30, June 3, 1958.*

## Appealing Party Not "Aggrieved"

THE United States court of appeals dismissed an appeal from a Federal Communications Commission order inasmuch as protestants were no longer "aggrieved" or "adversely affected." The FCC order had denied the protestants' petition for reconsideration of a prior grant of a station owner's application to assign a radio license to a third party.

The court of appeals held that the state supreme court decision affirming a lower court's decision against the protestants, re-

specting an option agreement they claimed the owner of the radio station had made with them, was a judicial determination that the protestants had no interest in the subject matter. This was so despite the fact that affirmance of the lower court judgment, by the state supreme court, had been without prejudice to any action at law which the protestants might have against the station owner. *Granik et al. v. Federal Communications Commission, 252 F2d 822.*

## FPC Lacks Authority to Determine Past Rates In Advisory Opinion

THE United States court of appeals reversed a 1957 order of the Federal Power Commission determining the effective rate which Phillips Petroleum Company, a natural gas producer, was entitled to charge Panhandle Eastern Pipe Line Company for gas following June 7, 1954. The parties were in dispute over the proper interpretation of a gas purchase contract containing escalation clauses. In a preliminary order the commission recited that it was necessary to determine the correct rate in the public interest and

to aid in the enforcement of the Natural Gas Act.

Without reaching the questions of contract interpretation which were resolved in the examiner's decision, the commission had reversed the examiner, concluding that a lower rate than that determined by the examiner was in effect on June 7, 1954. It had held that the rate could not be changed by the filing of revised billing statements, and that a change could only be effective by filing a change in rates pursuant to § 4(d) of the Natural Gas Act



## PUBLIC UTILITIES FORTNIGHTLY

and pertinent commission regulations.

The commission had ruled that the fact that Phillips might have been contractually entitled to a higher rate at the time of filing its rate schedule, following the Supreme Court decision in the 1954 Phillips case (3 PUR3d 129), was not controlling since it had not in fact filed that higher price, nor had it actually charged the higher price on the filing date or on June 7, 1954. The issue as to what rate Phillips was entitled to charge after the jurisdictional date involved a construction of commission regulations, the gas purchase contract, and the effect of certain billing statements filed with the contract.

### *Order Merely Advisory*

The court said it was clear that Phillips was seeking an advisory opinion by the commission to determine the rate which the producer was entitled to receive under

the contract and the rate schedule until the schedule should be lawfully changed by an order of the commission. The court held that the commission had no jurisdiction to render such an advisory opinion. It has no power to make reparation orders, and its power to fix rates is prospective only. Although § 14(a) of the Natural Gas Act gives the commission power to investigate any matter to determine whether a provision of the act has been violated, no such investigation was involved in this proceeding, the court stated.

The reversal of the commission did not leave Phillips without a remedy, however. The court noted that Phillips may institute a court action to recover any difference between what Panhandle has paid for gas and the amount claimed to be due under the contract and the rate schedule. *Phillips Petroleum Co. v. Federal Power Commission et al. No. 5695, May 28, 1958.*



## FPC Explains Electric Rate Reduction

PURSUANT to a remand order of a federal court of appeals (22 PUR3d 74), the Federal Power Commission made further explanation and findings respecting a rate reduction which it had imposed upon South Carolina Generating Company for sales to Georgia Power Company. Generating Company, a wholly owned subsidiary of South Carolina Electric & Gas Company, was formed primarily to provide energy to a du Pont plant operating an Atomic Energy Commission project on the Savannah river. Excess energy is sold to Georgia Power Company.

### *Income Tax Allowance*

Because of a 90 per cent debt ratio, Generating Company enjoys a relatively low income tax. It argued, along with the South Carolina commission, that the parent company had issued additional

amounts of common stock to offset on a consolidated basis the high debt ratio of its subsidiary, and that the parent did not therefore have as large a tax deduction as it otherwise would have. It was contended that the extra tax costs should have been charged to Generating Company as a cost of producing the power it sells to Georgia Power. This would be done by computing Generating Company's taxes by the use of an interest deduction determined on the basis of the system ratio of 62.8 per cent debt. The court had noted that the commission used the system capitalization ratio in determining a fair rate of return for Generating Company but considered the subsidiary and the parent separate entities for the purpose of determining the allowance for income taxes of the subsidiary. There was an apparent inconsistency.

## PROGRESS OF REGULATION

While Generating Company is legally and operationally a separate entity, the commission observed, it is financially a part of and dependent upon its parent. In determining an overall rate of return of 5.55 per cent, the commission used the overall cost of money for the parent system.

The return thus allowed afforded a 19 per cent return on Generating Company's actual 10 per cent common equity after deducting for the cost of its 90 per cent debt.

In finding that the extra taxes claimed to have been paid by the parent on account of the increase in its equity capital ratio were not a cost of Generating Company's service rendered to Georgia Power, the commission pointed out that the parent increased its equity ratio to improve its own financial rating, which on a consolidated basis with Generating Company was depressed not only by the latter's poor capital ratio but also by the parent's unwillingness to bring the system's debt ratio nearer a desirable 50 per cent. The parent deliberately adopted a high debt ratio for the generating company in order to enable it to provide low-cost energy to du Pont, said the commission.

Furthermore, the commission noted, the parent company also sought the benefit to its own financial rating which would flow from a large power contract with du Pont. It sought to improve its own market for power in its territory adjacent to the Atomic Energy Commission's Savannah river project. It sought to protect its service area against incursion of a competing electric utility. These benefits, for which the parent incurred the additional tax expense, inure not to Generating Company but to the parent, the commission stated.

### *Elimination of Escalation Clauses*

The commission had eliminated escalation clauses relating to a capacity charge

in Generating Company's contract with Georgia Power. This "basic capacity charge" was defined by a formula containing three components, of which two contained variables. The first component was designed to amortize and provide for a return on capital investment over the 25-year life of the contract. The second was a charge to reimburse expenses, the two components amounting to \$18.11 per kilowatt per year in 1956. The third was a fixed charge of \$7.20 per kilowatt per year representing a split of the difference between the estimated cost of the service to the seller and the assumed higher value to the buyer.

The commission had determined the capacity cost at \$21.948 for the 1956 test year. It eliminated the contract adjustment clauses on the ground that they failed to take into account factors that would decrease the cost of service. They applied only to factors which could be expected to increase in the future. They did not apply to total cost of service as determined by the commission.

More specifically, the commission pointed out, these clauses did not adjust the rate base to reflect the increasing deduction from original plant investment which should be made on account of increases in the reserve for depreciation. Also, cost reduction would result from an income tax saving on the fair return. Ordinary provisions for adjustment of the energy charge, relating principally to increases or decreases in the cost of fuel, were not eliminated.

### *Interest during Construction*

The court of appeals requested further explanation of the commission's allowance of 6 per cent interest on equity funds used for construction, in view of Generating Company's claim of 8 per cent and evidence that the funds actually cost 10 per cent. Common equity investors in con-

## PUBLIC UTILITIES FORTNIGHTLY

struction are legally entitled to no return during the construction period, the commission indicated, since there can be no earnings or dividends prior to the completion of construction and the beginning of operations. Such investors invest in future expectations only.

In the accounting and legal sense equity funds have no specific determinable cost during the period of construction, and any allowance therefor is of necessity in the

nature of compensation for use of the funds during the period. But since equity funds tied up during construction might be used for some other purpose, an economic cost is incurred which can be roughly measured by the going rate of interest that the funds might earn. Thus, the commission had allowed the going rate of 6 per cent. *Re South Carolina Generating Co. Opinion No. 297-A, Docket No. E-6585, June 2, 1958.*



### Dual-rate Contracts of Ocean Carriers Held Illegal Despite Approval of Maritime Board

THE United States Supreme Court, in an opinion to which three justices dissented, ruled that a dual-rate system long practiced by conference member steamship carriers and approved by the Federal Maritime Board was illegal per se under § 14 Third of the Shipping Act of 1916. Under the dual-rate system, a shipper pays less than regular rates for the same service upon signing an exclusive patronage contract.

Section 14 of the act proscribes deferred rebates and the "fighting ship," devices formerly employed to ruin outside competition. Along with these prohibitions, § 14 Third prohibits retaliation against shippers by refusing available space accommodations or "resort to other discriminating or unfair methods," because such shipper has patronized another carrier or filed a complaint. The act further provides that lawful agreements approved by the board shall be excepted from the operation of the antitrust laws.

#### *Stifling of Outside Competition*

The power vested in the board is to approve agreements not found to be unjustly or unfairly discriminatory. The court observed that the freedom allowed shipping conference carriers to agree upon

terms of competition, subject to approval by the board under the act, is limited to the freedom to agree upon terms regulating competition among themselves. Practices which have the purpose and effect of stifling competition of outside carriers are prohibited.

Section 14 Third, said the court, should be construed in the context of § 14 as a catchall section to prohibit devices not specifically enumerated but similar in purpose and effect to § 14 prohibitions. Whether a particular agreement is designed to have the unlawful effect of stifling outside competition is a question for the board to determine in the first instance. While the board approved the dual-rate system in this case, it found, however, that the contract was "a necessary competitive measure to offset the effect of nonconference competition" in order to obtain a greater share of shipping for conference members. On this finding, therefore, the dual-rate contract constituted a "resort to other discriminating or unfair methods" to stifle outside competition, proscribed by § 14 Third.

#### *Primary Jurisdiction*

The court observed that it has held in other cases that the board has primary

## PROGRESS OF REGULATION

jurisdiction to determine the validity of a dual-rate system in the first instance. It indicated, however, that the cases do not signify that the statute left the board free to approve or disapprove the agreements under attack. The court intimated that the board's function consisted mainly in its expert gathering and marshaling of relevant facts. The primary administrative

jurisdiction was thus relegated to a device to prepare the way for a judicial determination of the scope and meaning of the statute as applied to the facts of the case. "This," said Justice Frankfurter, dissenting, "is to make a mockery of the doctrine of primary jurisdiction." *Federal Maritime Board v. Isbrandtsen Co., Inc. et al.* 2 L ed 2d 926, 78 S Ct 851.



### Allowance above Cost of Capital in Fixing Return Allowance Held Erroneous

THE Pennsylvania superior court reversed in part and remanded an order granting a water rate increase, holding that the commission's allowance above the cost of capital in determining a fair rate of return was not supported by the evidence.

The commission had made an allowance of .12 per cent above the cost of capital in determining a return of 5.80 per cent. It had observed that the capital markets fluctuate constantly and that its finding was based upon its review of the capital costs indicated by the record, knowledge of current security markets, and the various elements comprising the company's operations and organization.

The court deemed these reasons unacceptable, citing the *Manufacturers Light & Heat Company* cases (16 PUR3d 319 and 17 PUR3d 249). In those cases it had been held that such an allowance was improper as it had no foundation in the evidence but was a double allowance for the same factors entering into the determination of the cost of capital.

#### *Capital Structure*

The court disagreed with the argument that the commission improperly used a hypothetical capital structure and applied thereto an assumed cost of capital rather than the historical cost of capital as ap-

plied to the company's existing capital structure. It was argued, in effect, that the existing capital structure, being predominantly debt capital, should have been accepted since it would result in a lower composite cost of capital.

There was slight variation between the actual capital structure of the company and that accepted by the commission in determining a composite cost of capital, which in turn was used as a guide in fixing return. The court held that such variation would be material if a rate proceeding were simply to determine the characteristics of a utility at the cutoff date without regard for future operation and without considering whether the use of such actualities is fair and reasonable to both the company and the consumer.

Conceding that the return allowance must be fair, the court said that the commission may consider a number of factors if substantiated by the evidence. An acceptable consideration in arriving at a basis for determining such an allowance is known as "cost of capital"; that is, a percentage figure of the cost a utility would be obliged to pay to obtain debt and equity capital.

The court observed that cost of capital, when properly determined, indicates that the commission has given consideration to the financial structure of the company,



## PUBLIC UTILITIES FORTNIGHTLY

credit standing, dividends, interest, attendant risks, regulatory lag, wasting assets, and any peculiar features of the company involved. A fair return allowance is not always synonymous with the cost of capital, but usually cost of capital is one of the most important bases upon which a return allowance is found.

In order to arrive at cost of capital the commission determines a capital structure to which the respective costs of debt and equity may be applied in proper proportions.

Where, as in this case, the company is a wholly owned subsidiary, its structure may not be one which it would maintain if it were obliged to obtain its debt and equity financing on the open market rather than from a parent company. In such instances the actual capital structure may be weighted too heavily on the debt side, or on the equity side. Use of the actual capital structure in such circumstances might be unfair to either the company or its customers, depending upon whether debt or equity is disproportionately high. Under such circumstances, the court said, the commission must make adjustments based upon substantial evidence in order to reach a fair result.

The capital structure used by the commission was similar to those of comparable water companies. The court concluded that it was proper for the commission to adjust the structure to arrive at one which would be fair to both the company and the ratepayers in the computation of the cost of capital. It said that, in view of the great fluctuation in the capital structure of this company, it was the commission's duty to scrutinize the evidence carefully and to

make adjustments which would bring the capital structure to be used for rate purposes in accord with one which was fair, reasonable, and stable.

### *Consolidated Tax Return Savings*

In determining the annual allowance for income taxes as an operating charge, the commission had recognized that the company had an annual saving of 45 per cent in its tax liability resulting from a consolidated income tax return filed by its parent company. The court held this was proper as against the company's contention that it should have been allowed an amount equal to that which it pays to its parent company regardless of any lesser liability under the consolidated return actually filed by the parent.

In rejecting the company's contention, the court held that the fact that the company actually pays to the parent an amount for taxes greater than its proper proportionate share of the consolidated tax liability merely accomplishes in fact that which it is forbidden to do. The only proper tax expense which the company might pass on to customers was held to be its proportionate share of the consolidated return actually paid.

The use of a consolidated tax return, the same as the use of a holding company system of investment, was held to be of mutual benefit to the parent and its subsidiaries. Advantages which result from such a system should benefit the consuming public as well as the company and the parent, according to the court. *Riverton Consol. Water Co. et al. v. Pennsylvania Pub. Utility Commission et al.* 140 A2d 114.



## Commission Suspension without Hearing Invalid

**T**HE North Dakota supreme court reversed a lower court judgment en-

joining an electric company from charging and collecting proposed rates. The court



## PROGRESS OF REGULATION

held that prior to ordering a hearing on new and increased rate schedules filed by a utility, the commission did not have authority to rule that the revised rates would be suspended until its further order. The rates became effective after expiration of the 120-day period following the time the rates would have gone into effect had no hearing been ordered.

To the extent that a statute providing that no change shall be made by a public utility in any rate which has been filed and published except after thirty days' notice to the commission conflicts with a statute providing that every order entered by the commission shall continue in force until expiration of the time, if any, named by

the commission in such order or until revoked or modified by the commission, the former statute supersedes and repeals the latter statute.

The power of suspension of a rate schedule filed with the commission by a utility has been entrusted to the commission only, pointed out the court, to be exercised in the manner provided by the North Dakota statute.

Where the commission failed to suspend the filed rates, the court was without power to restrain collection of such rates as a matter of its own discretion. *North Dakota ex rel. North Dakota Pub. Service Commission v. Montana-Dakota Utilities Co.* 89 NW2d 94.



### State Commission Lacks Jurisdiction over Telephone Service to Federal Air Base

THE North Dakota commission dismissed for lack of jurisdiction a telephone company's application for authority to serve a federal air force base. The base is the property of the United States government. It was purchased for purposes stated in the federal Constitution, and the consent for such purposes had been given by the state of North Dakota. The commission held, therefore, that exclusive jurisdiction over such territory rested with the federal government.

The authority of state laws or their administration cannot interfere with the execution of a national purpose. Where enforcement of a state law would handicap efforts to carry out the plans of the United States, the state law must give way.

#### *Certificate Requirement*

The statute authorizing the Secretary of the Air Force to procure telephone service provides that he shall utilize to the fullest extent practicable the facilities and capabilities of communication common

carriers, including telephone companies. He is not bound to deal with existing telephone companies, however. He may contract with a company not in the area if it is not practicable for the existing company to handle the project adequately. In the present case, the Secretary of the Air Force had contracted with Bell Telephone Company rather than with the existing company. The commission also pointed out that the statute does not require the company with whom the Secretary desires to contract to obtain a certificate from the state commission.

The commission held that the decision as to who shall serve the air force base rests with the Secretary of the Air Force and not with the commission or the courts. It said that if it were to exercise jurisdiction, it would be assuming a power of review over the decision of the Secretary. Furthermore, it would possess a complete veto power over the project in question and over similar projects since it would be within the commission's power to deny

## PUBLIC UTILITIES FORTNIGHTLY

all applicants the right to serve the federal installation.

The commission believed that the inevitable result of assuming jurisdiction in the instant case would be to interfere with the Secretary's freedom to contract with

whichever company was best qualified to handle the project. This the supremacy clause of the federal Constitution forbids. Consequently, the commission refused to act. *Re Souris River Teleph. Mut. Aid Corp. Case No. 5669, April 21, 1958.*



### Present Return Deemed Adequate for Low Debt Ratio Company

THE North Dakota commission denied a requested rate increase to a Bell telephone subsidiary, finding that the present return of 6.38 per cent was within the upper limit of the zone of reasonableness. The company had a very low debt ratio. The commission refused to take into account the alleged effects of attrition upon the company's return because the undisputed evidence disclosed that not only had revenues increased sufficiently to compensate or balance the effects of erosion, but they had actually increased at a greater rate so that the rate of return during the test period had continually increased.

Plant under construction and plant held for future use were excluded from the rate base.

The cash working capital allowance was adjusted downward, the commission commenting that cash working capital is a proper item to be included in the rate base if it is required to be furnished by investment capital, but to the extent that it is

offset or displaced by funds not furnished by the investor, it is properly excluded.

#### *Average Rate Base*

The company claimed a year-end rate base was the one that should be used, to include all plant in service at the end of the test period. Under such a method, pointed out the commission, the ratepayer is required to pay a rate of return for twelve months on a facility that may have been in use only one month. Since the "rate of return" is the "charge" that the ratepayer is required to pay for the use of the facilities, it is apparent that such a method of figuring results in the ratepayer being charged 12 times the actual amount of use which he receives of the facility in that year. This was said to be manifestly unfair and unreasonable. Accordingly, the commission found that an average rate base should be used. *Re Northwestern Bell Teleph. Co. Case No. 5571, April 21, 1958.*



### Community Antenna Television System Constitutes a Public Utility

THE Wyoming commission has reiterated its earlier ruling (6 PUR3d 129) that community antenna television systems are public utilities. It did so in a proceeding to require such companies to apply for certificates and to file rate schedules and annual reports.

These companies have no contractual

relations with the broadcasting stations whose signals they pick up off the air in Wyoming. Their operations are clothed with the public interest, however, in that their systems and the microwave facilities bring to a given community highly desirable television programs.

The systems are financed largely with

## PROGRESS OF REGULATION

subscriber contributions. The signals intercepted and distributed by them at a monthly charge do not cost them anything. The commission concluded that these factors, coupled with the rather harsh provisions of their service contracts, constituted sufficient reason why their service and rates should be regulated.

### *Need for Regulation*

Noting that community antenna television service is a form of pay television, the commission said that if persons furnishing this type of service were not controlled and regulated by a government agency the door would be left open to charge exorbitant rates, to refuse service arbitrarily, and to discriminate between subscribers. This would be particularly true with respect to live television programs. Furthermore, the commission said, television is a service which is free to most people in the country.

The commission based its action upon a statute which, in effect, says that any person or corporation that owns or operates any plant or facility for the transmission of intelligence by electricity to or for the public is a public utility. Community antenna television systems are engaged in the business of distributing intelligence in the form of news and world events, scientific, educational, dramatic, musical, and other types of TV programs to the public over their plant facilities and related microwave systems through the use of electricity.

### *Interstate or Intrastate Commerce*

The television companies claimed that they are engaged in interstate commerce and thus exempt from regulation by the Wyoming commission. The commission

disagreed, however, on the ground that the companies are not engaged in TV broadcasting. In fact, the rules of the Federal Communications Commission expressly prohibit them from entering this field.

Their facilities and operations are wholly within the boundary lines of the state of Wyoming. They pick up television signals off-the-air in this state over which they admittedly have no control. When intercepted, these signals are weak, dissipated, and unusable until they are revived in some fashion. At the point of interception and throughout their entire journey to subscribers' sets they are monitored, converted, modulated, amplified, and otherwise treated electronically so that they will produce an acceptable and salable picture.

This process, in the commission's opinion, localizes them and takes them completely out of the stream of interstate commerce. In other words, the commission said, when these signals are intercepted for processing, interstate commerce ceases and intrastate commerce begins.

### *Monopoly Factor*

The commission found no merit in the companies' contention that they do not enjoy a monopoly. The commission could find nothing in the record to reveal any instant where two or more of the involved companies were operating in competition with each other in any community in Wyoming. Furthermore, said the commission, it has a statutory duty to prevent duplication of facilities and destructive competition between rival utilities. *Re Community Television Systems of Wyoming et al. Docket No. 9330, May 28, 1958.*



## Reasonableness of Through Rate for ICC Determination, Not Court's

THE United States court of appeals reversed and remanded with directions a lower court judgment granting a motor carrier unpaid transportation charges on shipments of freight. The government's main defense was that the through rate was prima facie unreasonable and unlawful to the extent that it exceeded the aggregate of intermediate rates.

The district court could not, itself, undertake an independent investigation into the reasonableness of the through rate, held the court, but it could hold its

judgment in abeyance to permit a determination by the Interstate Commerce Commission of the reasonableness of the rate. The fact that the through rate was higher than the aggregate of the intermediate rates would not prevent the through rate from being the applicable rate of the carrier. However, authority to determine the reasonableness of the filed rate when that issue is incident to a federally cognizable cause of action pending in a court vests in the commission. *United States v. T.I.M.E., Inc.* 252 F2d 178.



## Municipal Plant Justified in Charging for Water Service Extension

THE New Jersey supreme court affirmed a lower court judgment dismissing an action brought by a real estate developer against a municipality to recover the cost of a water main extension to its real estate development. The court held that the municipality, which operated a water utility originally acquired from a private source that had been servicing, under an exclusive franchise, an area outside the limits of the municipality, was under no absolute duty to refrain from charging customers for the cost of a service extension in the absence of a commission order.

The municipality's action in requiring the developer to pay the cost of the extension could not be considered wrongful, held the court, and the developer could

not complain that the contract was not entered into voluntarily because of economic compulsion or duress.

The developer had based its theory for recovery on the ground that the municipality's action constituted either violation of an absolute duty to extend service without charge or that denial of service was an abuse of discretion.

Both theories, said the court, necessitated judicial determination of the reasonableness of the terms exacted for extension. Since that matter was one which in the first instance was required to be determined by the commission, the developer's claims were not maintainable in a court without a prior ruling from the commission. *Woodside Homes, Inc. v. Town of Morristown*, 141 A2d 8.

---

## Other Recent Rulings

*Extended Area Service Denied.* Pacific Telephone & Telegraph Company was

JULY 31, 1958

denied authority by the California commission to establish extended area service

## PROGRESS OF REGULATION

between Fresno and nearby Clovis by means of expanding the Fresno exchange to include the Clovis exchange, since a resultant reduction in revenues would impose an unreasonable burden on the company's customers in other areas. *Re Pacific Teleph. & Teleg. Co. Decision No. 56729, Application No. 37769 (Amended), May 27, 1958.*

**Municipal Plant Return.** The Wisconsin commission considered a return of 5.5 per cent reasonable for a newly certificated municipal water plant. *Re Village of Dallas, CA-3596, April 10, 1958.*

**TV Tower Site.** The United States court of appeals held that the Federal Communications Commission had not abused its discretion in declining to revoke its grant of permission to a television station to change the location of its transmitter tower because the new tower was alleged to be dangerous to the lives of area residents inasmuch as the station's previous tower had collapsed with some loss of life. *White v. Federal Communications Commission, 252 F2d 856.*

**Concerted Rail Rates.** A federal court of appeals held that concerted "variable spot bids" and "packaged bids" by railroads for military traffic were violative of the antitrust laws unless protected as approved agreements under the Interstate Commerce Act; and the case was remanded to give the Interstate Commerce Commission an opportunity to pass on this point. *Atchison, T. & S. F. R. Co. et al. v. Aircoach Transport Asso. et al. 253 F2d 877.*

**ICC Abandonment Approval.** The United States district court held that a municipality could not enjoin a railroad from operating along a designated street

without first exhausting administrative remedies by applying to the Interstate Commerce Commission for abandonment of the line. *City of Des Moines et al. v. Chicago & N. W. R. Co. 159 F Supp 223.*

**Fender Guard Statute Unconstitutional.** The United States district court held that an Illinois statute requiring motor vehicles to be equipped with contour type rear fender splash guards, rather than straight mud flaps as permitted in other states, was unconstitutional as imposing a tremendous burden upon interstate commerce because of the lack of uniformity among states, not justified by the merits of the statute as a safety measure, especially as to commerce with Arkansas, where contour splash guards were illegal. *Navajo Freight Lines, Inc. et al. v. Bibb et al. 159 F Supp 385.*

**Reparation Prerequisite.** The United States district court held that a consignee's right to recover reparation from a railroad on the basis of unreasonableness of charges paid was barred unless the Interstate Commerce Commission first determined that the charges were not just and reasonable at the time they were paid; the mere fact that the commission's order had canceled charges for the future did not necessarily mean that the charges were unlawful. *Feinstein et al. v. New York C. R. Co. 159 F Supp 460.*

**Convertible Options.** The United States district court held that it was within the discretion of the Interstate Commerce Commission to approve a plan of an investment company holding stock in carriers to use options for the conversion of its preferred stock into common. *Breswick & Co. et al. v. United States et al. 160 F Supp 754.*

**Penalty Not Barred by Subterfuge.**



## PUBLIC UTILITIES FORTNIGHTLY

The Virginia supreme court of appeals held that penalties assessed by the state commission against a motor carrier having a certificate to handle interstate shipments but no state certificate were justified where the carrier had accepted shipments to points within the state but had transported them to points outside the state and back to the point of destination, the court holding that such circuitry of movement constituted mere subterfuge and that the shipments constituted intrastate commerce subject to commission jurisdiction. *Service Storage & Transfer Co., Inc. v. Commonwealth of Virginia*, 102 SE2d 339.

*Rate Statute Too Vague.* The Virginia supreme court held that a statute making it unlawful for a licensed carrier to transport goods at a cheaper rate than that fixed for common carriers was invalid in that it was too vague and indefinite to establish a reasonable standard under which rates could be imposed on contract carriers. *Mundy Motor Lines v. E. I. du Pont de Nemours & Co.* 103 SE2d 245.

*Finality Necessary for Review.* The Texas supreme court held that a commission order entered after a hearing and investigation in which a shipper was not a party, which purported to subject certain truck movements including those of the shipper to higher intrastate rates, but which would have to be the subject matter of additional proceedings before any civil or criminal liability on the part of the shipper or others would accrue, was not a "final" administrative order which was judicially reviewable. *Sun Oil Co. v. Texas R. Commission*, 311 SW2d 235.

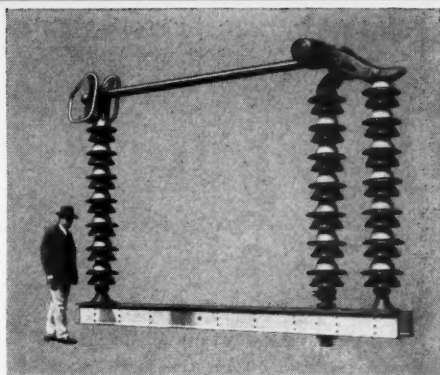
*Transit Company Fare Increase.* The California commission approved a fare in-

crease for a transit company which would result in a return of 25.09 per cent and an operating ratio of 95.49 per cent. *Re Long Beach Motor Bus Co. Decision No. 56685, Application No. 39633, May 13, 1958.*

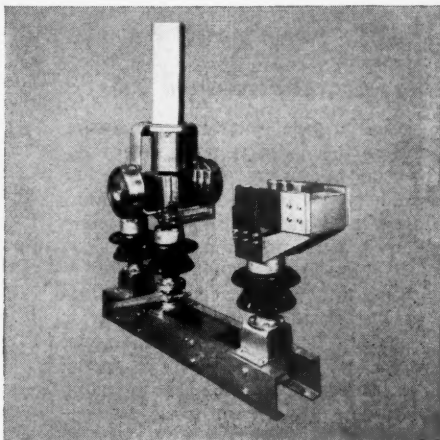
*Former Company Town.* The California commission, in fixing the rates for a water company which had been formerly owned by a lumber company and had been serving residents of the company town, held that the rates as requested were greater than the service was reasonably worth and that present customers should not be required to pay for all the operations of the overdeveloped system. *Re Northern Counties Utility Co. Decision No. 56664, Application No. 39595, May 13, 1958.*

*"Double Factor" Minimum Rates.* The California commission denied applications made by motor carrier associations for establishment of "double factor" minimum hourly rates for the transportation of commodities by dump truck where the added difficulties of administration and enforcement offset any advantages that might accrue. *Re California Dump Truck Owners Asso. Decision No. 56683, Case No. 5437, May 13, 1958.*

*Rate Increase for Added Investment.* In order to offset a declining rate of return of a telephone company resulting from an expansion program, the North Carolina commission granted an interim rate increase pending investigation, basing its action upon evidence that the rate of return ranged from 4.30 per cent on net investment before the increase to 7.60 per cent on average net investment after the increase. *Re Morris Teleph. Co. Docket No. P-38, Sub 11, June 17, 1958.*



A big MK-40—345kv, 1600-ampere single-pole unit.



Another big one—a 34.5kv, 4000-ampere MK-40 single-pole air switch in locked-open position.

## ET LOWER OPERATING COSTS, LONG-TIME DEPENDABILITY with rugged DELTA-STAR MK-40 Air Switches

### Design features of MK-40 switches

- Simplified, factory-sealed blade-operating mechanism develops maximum force where most needed, locks blade in both open and closed positions.
- Same basic design in all rated sizes: 7.5kv to 400kv, 400 to 5000 amperes.
- Greaseless, non-rusting rotating insulator bearings.
- Fully adjustable mechanism; non-slip pipe-piercing set screws.

These popular vertical-break switches offer long service life with lowest installation and maintenance cost.

They're built to withstand rugged service under severe ice and corrosive atmospheric conditions.

They're built to assure the best electrical and mechanical characteristics. High-pressure silver-to-copper or silver-to-silver contacts—minimum current interchange surfaces.

They're built to maintain contact pressure over years of service. Ample material is provided to dissipate heat even under short-circuit conditions.

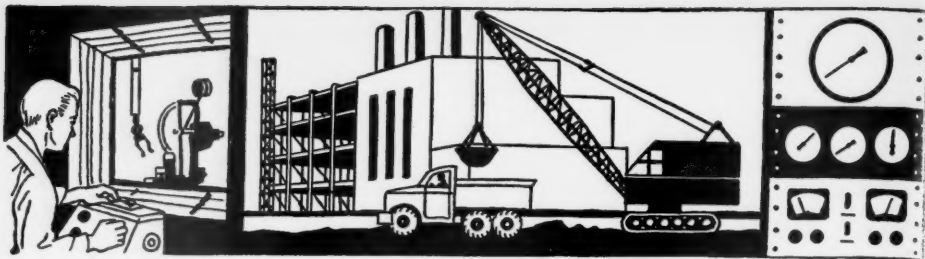
MK-40 switches are available in current ratings from 400 to 5000 amperes. 7.5 to 400kv.

For full technical information, call your nearest Delta-Star representative or write today to Dept. 47B, Delta-Star Electric Division, H. K. Porter Company, Inc., 2437 Fulton Street, Chicago 12, Illinois. District offices in principal cities.

# H. K. PORTER COMPANY, INC.

## DELTA-STAR ELECTRIC DIVISION

Connors Steel, Delta-Star Electric, Disston, Forge and Fittings, Leschen Wire Rope, Quaker Rubber, Refractories, Riverside-Alloy Metal, Vulcan-Kidd Steel, H. K. Porter Company (Canada) Ltd.



## Industrial Progress

### 200,000 KW Unit Put Into Operation By Southern Cal. Ed.

THE largest electrical generating unit in the West was put into commercial operation June 30th when Southern California Edison Company threw the switch on its new Huntington beach steam station.

It is the first 200,000-kilowatt generating unit to be placed in operation on the Pacific Coast, according to James F. Davenport, executive vice president of the company. A second identical unit is scheduled for completion in the Fall and space has been provided for additional generating units when the occasion demands. The two initial units will cost about \$58,000,000.

The turbine-generator is of a new and improved design, Mr. Davenport said. An "axial flow" design permits the steam to move in a continuous horizontal path without the necessity of any downward right-angle turns, it was explained, resulting in a high rate of efficiency. The unit also uses double turbine, "cross-compound," generators for the first time in the West.

The boiler which provides steam for the generated unit is also the largest in the West. It operates at a throttle pressure of 2400 pounds per square inch and a temperature of 1050 degrees Fahrenheit. This is the highest pressure and temperature presently used in any steam station west of Chicago.

Among the engineering feats was construction of a double pipeline extending about 2,000 feet under the ocean floor, to be used in pumping sea water into the generating station. Three divers worked in relays to help lay the sections of concrete pipe, 16 feet in diameter and weighing 50 tons a piece. With one exception this is the largest concrete pipe ever cast. The double pipeline will be able to carry

390,000 gallons of sea water per minute to the Edison plant.

### APED Producing Fuel Elements For Dresden Station

MASS production of 488 fuel elements for this country's largest all-nuclear power plant, the Dresden station near Chicago, began recently at the General Electric Atomic Power Equipment Department (APED).

APED is building the Dresden plant for the Commonwealth Edison Company and the Nuclear Power Group, Inc.

Each of the 11-foot, rod-type assemblies will contain 144 smaller fuel rod segments containing pellets of sintered uranium dioxide.

When completed the 488-element Dresden reactor core will contain about 60 tons of uranium. The fuel will have an average life of about 3.5 years after the station goes into operation early in 1960. A coal-fired generating plant of the same size would burn 3,600,000 tons of fuel during the same period.

As they are finished, the Dresden fuel elements will be stored in tubular drums at APED. They will be shipped to the Dresden site, 47 miles southwest of Chicago, after permanent storage buildings are completed there in August.

APED's facilities for mass production of uranium fuel pellets, small components of fuel assemblies, started in February, with manufacture of rod-type elements expected to reach maximum capacity in September. Final assembly of the first of the 488 Dresden elements was recently completed.

In addition to producing Dresden fuel elements, APED also is marketing fuel for other customers as a separate product operation.

Construction at the 1,950-acre Dresden site already is about 30 per cent complete, with full operation of

the plant scheduled for mid-1960. Fred A. Hollenbach, APED resident manager at Dresden said that equipment for the station is already being moved into the 190-foot sphere. The sphere will house the reactor, a steam separating drum, secondary steam generators, recirculating pumps and auxiliaries, all of which make up "steam generator package."

### AIEE Raises Thirteen Members To Grade of Fellow

THE American Institute of Electrical Engineers has announced that thirteen of its members have been raised to grade of Fellow—the Institute's highest grade.

AIEE, one of the world's largest engineering societies, awards the grade of Fellow to members who have seen the electrical engineering profession with distinction. Those honored their citations are:

Pierre J. Ailleret, Directeur Général des Etudes et Recherches, Electricité de France, Paris, France, "contributions to planning, execution and interconnection of a national electric system."


Thomas Everett Browne, Jr., Manager, Research and Insulation Division, switchgear long range development department, Westinghouse Electric Corporation, East Pittsburgh, Pa. for "research contributions in rapid arc quenching for high-voltage circuit interrupters."

Francois Michel Cahen, Contrôleur Général à la Direction des Etudes et Recherches, Electricité de France, Paris, France for "contributions to stable, secured operations of an electric high voltage continental interconnected system."

Harry F. Dart, patent engineer, Westinghouse Electric Corporation, Elmira, N. Y., for "contributions to the design of high voltage circuit interrupters."

(Continued on page 22)

PUBLIC UTILITIES FORTNIGHTLY—JULY 31, 1958



# Columbia Gas serves a very special part of America

More than one-fifth of  
all the country's indus-  
trial users of natural  
gas are located in the  
seven states where  
Columbia serves.



## THE COLUMBIA *Gas* SYSTEM, INC.

COLUMBIA GAS SYSTEM SERVICE CORPORATION  
COLUMBIA HYDROCARBON CORPORATION  
120 EAST 41st STREET, NEW YORK 17, N. Y.

**CHARLESTON GROUP:** UNITED FUEL GAS COMPANY, 1700 MacCORKLE AVENUE, S.E., CHARLESTON, WEST VIRGINIA. **COLUMBUS GROUP:** THE OHIO FUEL GAS COMPANY, 99 NORTH FRONT ST., COLUMBUS 15, OHIO. **PITTSBURGH GROUP:** THE MANUFACTURERS LIGHT AND HEAT COMPANY, 800 UNION TRUST BLDG., PITTSBURGH 19, PA.

Throughout its service territory—in Ohio, Pennsylvania, West Virginia, Kentucky, Virginia, Maryland and southern New York—natural gas continues to be the preferred fuel for home and industry.



the research and development of electron tubes."

James Hayward Harlow, chief mechanical engineer, Philadelphia Electric Company, Philadelphia, Pa., for "contributions to improve the economy of electric power generation."

Tom Cox Lloyd, chief engineer, Robbin & Meyers, Inc., Springfield, Ohio, for "contributions to the art of electrical motor design."

Harry Able Lott, manager, planning department, Southern California Edison Company, Los Angeles, Calif., for "contributions to the planning and operation of a major power system and the operation of major power system interconnections."

Louis Meyerhoff, chief research engineer, General Cable Corporation, Bayonne, N. J., for "contributions to the development of high voltage cables."

P. H. Robinson, executive vice-president, Houston Lighting & Power Company, Houston, Texas, for "contributions to economical design and protection of an electric power system."

Wayne Curtis Hall, associate director of research for nucleonics, U. S. Naval Research Laboratory (NRL) Washington, D. C. for "contributions to administration of productive research and specifically to control of electrostatic interference with aviation communications."

Edgar Laroe Kanouse, engineer in charge of design and construction, Department of Water and Power, City of Los Angeles, Calif. for "contributions to the art of high voltage power transmission."

John Hutchins Neher, senior engineer, Philadelphia Electric Company, Philadelphia, Pa., for "contributions to protective relay schemes and research on the thermal factors in underground power cables."

Elmer G. Norell, partner and chief electrical engineer, Sargent & Lundy Engineers, Chicago, Ill., for "contributions to the advancement of large scale electrical power generation."

### New Speakers Bureau Guide Published by Gas Industry

DIRECT assistance to gas companies in organizing and conducting speakers bureaus to promote public relations in their communities has been provided by the American Gas Association in a new "Speakers Kit" prepared by the A. G. A. Public Information Bureau.

A how-to-do-it booklet, titled "Face to Face," gives step-by-step suggestions for setting up a speakers bureau. This 16-page PAR Public Information presentation features practical pointers on how to get started, the methods of selecting and training company speakers, and suitable subject matter and techniques.

The kit also includes a number of sample speeches which can be easily adapted for local presentation, plus statistical and background information on the gas industry. The Public Information Bureau will supplement the kit from time to time with additional speech material and up-to-the-minute statistics.

### Diebold Issues Catalog On Steel Storage Files

DIEBOLD, Incorporated a leading manufacturer of office and bank equipment, has issued a 16-page catalog covering the company's comprehensive line of steel storage files.

Copies of the catalog are available free on request to Diebold, Incorporated, Canton 2, Ohio.

### Winners Announced in Electric Fan Display Contest

WINNERS in the sixth annual electric fan display contest were announced recently as electric fan manufacturers took a cautiously optimistic view of present and future business in their branch of the electrical industry. The contest is sponsored by the Electric Fan Section of the National Electrical Manufacturers Association.

In making the awards, R. O. Fickes, Chairman of the Section's Merchandising Committee, and the General Manager of General Electric Company's Automatic Blanket and Fan Department, said that "sales of fans of the types represented in the Section's scope have almost tripled in the last ten years." One survey, he said, shows that retail sales of such fans totaled \$180,000,000 last year as compared with \$70,000,000 in 1948.

Prize awards for this year's contest totaled \$3,000.00, with the grand prize—a \$1,000 U. S. Savings Bond—going to J. C. Dollins of Dollins Furniture Company, Paragould, Arkansas.

The contest is conducted for two purposes—to encourage the early display and sale of fans while stocks still are adequate in dealers' stores, and to reward those who have done outstanding jobs of making the public aware

that spring—not mid-summer—is the time to buy fans.

Because fans often are classified as items bought on impulse, the importance of attractive, eye-catching, traffic-stopping displays cannot be overemphasized, according to Mr. Fickes. In discussing the continued success of the fan business, he said that a large measure of credit is due to the fact that the industry is continually moving ahead in developing new products.

Included in the winners of awards in the Department Store and Electric Light and Power Company categories were the following:

\$500 Bond: Minnesota Power Light Company, Duluth, Minnesota; R. E. Anderson.

\$250 Bond: Public Service Electric & Gas Company, Newark, New Jersey; George W. Browne.

\$50 Bonds to each of the following: Ohio Edison Company, Springfield, Ohio, J. S. Dahlmann; Ohio Edison Company, Marion, Ohio, J. S. Dahlmann; Philadelphia Electric Company, Philadelphia, Pennsylvania, W. Gilbert Brown; New Orleans Public Service Inc., New Orleans 9, Louisiana, J. R. Guidroz.

William Brady, Director of Public Information, Consolidated Edison Company, of New York, Inc., was one of the judges of the contest.

### M. F. Hall Named Consulting Gas Engineer by Ebasco

MARVIN F. HALL has been appointed consulting gas engineer by Ebasco Services Incorporated announced recently. In this capacity he will be in charge of gas engineering activities for the engineering, construction and business consulting firm.

Mr. Hall began his career in the gas industry in 1926 after graduation from the University of Michigan. In 1932 he joined Washington Gas Light Company as a gas engineer and in the capacity worked extensively on all phases of both manufactured and natural gas utility operations including production, distribution, engineering and construction and special management studies.

He joined Ebasco's consulting engineering department in 1951 and has since handled assignments which included studies of future supplies of natural gas and crude oil reserves; forecast of petroleum traffic through the Suez Canal; propane gas storage problems in Canada; a study of gas engineering practice and economic feasibility of natural gas pipelines.



## INDUSTRIAL PROGRESS— (Continued)

### Bendix Expands New York Computer Facilities, Staff

THE Computer Division of Bendix Aviation Corporation announced recently it has enlarged its district office and staff in New York city and has established a computing center there. The office, at 205 East 42nd street, under the direction of Robert P. Romano. The division said the office now is equipped with a Bendix G-15 digital computer and accessory equipment and has additional technical sales support.

Bendix manufactures a middle-range, relatively low-priced computer designed to perform office, engineering and scientific computation. Headquarters and factory are in Los Angeles.

### Industry's Changing Need for People and Skills

EDUCATION faces an unprecedented challenge in view of the rapidity with which the scientific and industrial world is changing. Major impetus for our industrial machinery and scientific manpower was initiated during World War II during which our technological skills were enormously accelerated.

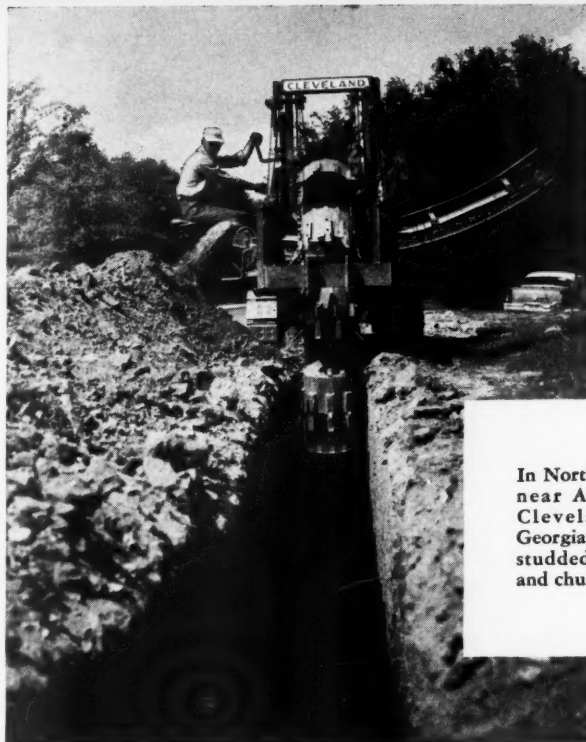
Thus did David H. Dawson, vice president and director of E. I. du Pont de Nemours & Company, preface his speech to the National Congress of Parents and Teachers last month in Omaha, Nebraska.

Increasing technological complexity is the most conspicuous change on the industrial scene in the last twenty years, he said. Today we have electronic computers that can solve intricate mathematical problems. Today we are beginning to extract electrical power from the atom.

Today man-made fibers such as nylon have made silk almost obsolete. Today we can dial a phone call from Omaha to New York without human intervention. Mechanization has greatly decreased the demand for unskilled labor, it will inevitably become still less. Mr. Dawson emphasized that, "The most important effect has been decreased emphasis on physical labor per se, and increased emphasis on ability to build, operate and repair."

He also stressed that today there is demand for ability to understand the complicated machines being used in industry. This requires a high order of mental alertness, too, so that any malfunctioning of a machine can be not only anticipated but corrected with celerity. Mr. Dawson pointed out that the increasing technical complexity

(Continued on page 24)

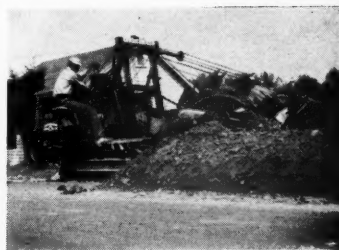


In North Druid Hills near Atlanta, this Cleveland 95 digs Georgia red clay, often studded with quartz and chunks of granite.

## nine Clevelands . . . never a failure in the field

"We have used Clevelands ever since 1946, when our company was organized," says C. V. Lanier, field superintendent for the Concrete Construction Co. of Atlanta, Ga., "and currently we are operating nine. Mechanically, we have never had a Cleveland halt in the field."

"We have encountered every sort of obstacle and have trenched through blue granite rock, sand rock, shale, stumps, on flat land and hilly, through all types of weather. Our Clevelands have been economical to operate, easy to maintain mechanically, adaptable to every terrain and simple to handle."



There's nothing like a Cleveland for trenching . . . accurate . . . fast . . . dependable . . . clean.

## The CLEVELAND TRENCHER Co.

20100 ST. CLAIR AVE. • CLEVELAND 17, OHIO



## INDUSTRIAL PROGRESS—(Continued)

of our industrial world is requiring both higher and more widespread mechanical skills. . . . Increasingly we will need more people with ability to observe, to understand, to analyze and solve problems, and to report and make clear the results and consequences of their solutions."

More effective educational procedures will be required, he stated, to fit people for the new kind of industrial climate in which they must compete.

More and more is a basic knowledge of mathematics and the physical sciences going to be required for compe-

tence in the industrial world, Mr. Dawson insisted. And not only for scientists and engineers. Nearly everyone will need it in order to fully understand the business in which they are working.

Mr. Dawson also said he thinks that a system for accelerating education should be adopted. This could be achieved, he believes, by keeping students working at their optimum ability and by instituting various methods of competition and motivation.

In our approach to this new world in which we find ourselves, he as-

serted, there is no need to sacrifice our own individualities. We don't need conformists, but rather men and women who can think independently. Admitting that teamwork is important, he also pointed out that, "The whole spirit of the future will require that men and women resist anyone who tries to force them into a mold, no matter whether a government bureaucrat, a business executive, or a teacher attempts the forcing. Industry will continue to have as its greatest need men and women who can think for themselves, who can be depended upon to act without instructions from another individual or a group."

He emphasized that technological superiority alone will not determine the winner of conflicts which promise to abound in the world of the future. "They can be won," he said, "only by a nation of free men, free to think for themselves, encouraged to think for themselves, and trained to think for themselves."

### IBM Announces New Card Filing Machine

A NEW card filing machine that arranges punched cards in any desired sequence at speeds better than two and one-half times faster than its predecessors has been introduced by International Business Machines Corporation. Known as the IBM 88 Collator, the new high-speed device is the most recent addition to the product line of the company's Data Processing Division. The IBM 88 was shown publicly for the first time at the National Machine Accountants Association Seventh Annual Conference and Business Show in Atlantic City, New Jersey, June 18-20.

Principal function of the new IBM 88 Collator is to compare two files of punched cards simultaneously in order that the cards can be matched, merged, selected, and sequences checked for subsequent accounting operations. With the IBM 88, cards are entered into the machine from card feeding devices at each end. The primary or main feed consists of a file feed device that can hold up to 3,600 cards, and the secondary feed is a conventional card hopper. Cards enter from each feed device at the rate of 650 per minute, so that with both feeds in use, up to 1,300 cards per minute can be processed. A sales analysis card merging job that formerly took a minimum of eight hours to perform with an earlier model collator can now be performed by the new IBM 88 in only three hours.

*This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these Bonds. The offer is made only by the Prospectus.*

**\$65,000,000**

## **New York Telephone Company**

### **Refunding Mortgage 4½% Bonds, Series K**

*Dated July 1, 1958*

*Due July 1, 1993*

*Interest payable January 1 and July 1 in New York City*

**Price 102.343% and Accrued Interest**

*Copies of the Prospectus may be obtained in any State from only such of the undersigned as may legally offer these Bonds in compliance with the securities laws of such State.*

#### **MORGAN STANLEY & CO.**

**BLYTH & CO., INC.**

**DREXEL & CO.**

**EASTMAN DILLON, UNION SECURITIES & CO.**

**GLORE, FORGAN & CO.**

**GOLDMAN, SACHS & CO.**

**HARRIMAN RIPLEY & CO.**  
*Incorporated*

**KIDDER, PEABODY & CO.**

**LEHMAN BROTHERS**

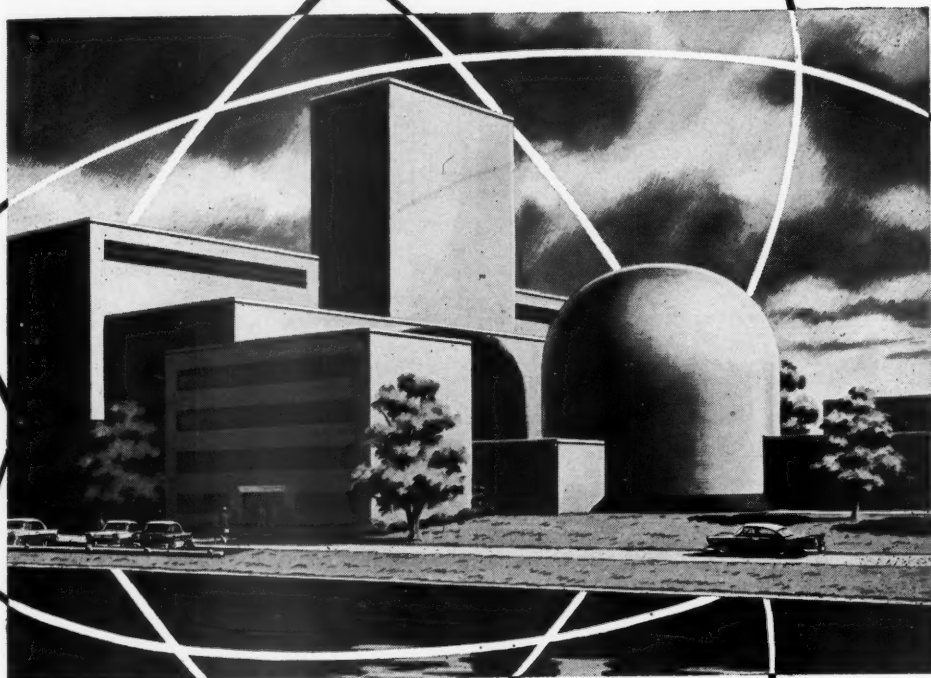
**MERRILL LYNCH, PIERCE, FENNER & SMITH**

**SMITH, BARNEY & CO.**

**STONE & WEBSTER SECURITIES CORPORATION**

**WHITE, WELD & CO.**

*July 10, 1958.*



## ENRICO FERMI ATOMIC POWER PLANT

100,000 Kw Capacity

Under Construction Near Monroe, Michigan

by

POWER REACTOR DEVELOPMENT COMPANY

and

THE DETROIT EDISON COMPANY

• • •

**COMMONWEALTH ASSOCIATES INC.**

Architect-Engineer for the Reactor Plant



## COMMONWEALTH SERVICES INC.

New York, N. Y. Jackson, Mich. Washington, D. C. Houston, Tex.

300 PARK AVENUE, NEW YORK 22, NEW YORK

## COMMONWEALTH ASSOCIATES INC.

JACKSON, MICHIGAN

The Commonwealth Professional Engineering Organization

## INDUSTRIAL PROGRESS—(Continued)

### Unique \$93 Million Coal-Electric-Aluminum Industrial Complex

THE American Electric Power System has revealed that its giant Kammer power plant near Moundsville, W. Va., is now in operation.

Start-up of the first unit of the \$93-million operation represents an industrial "triple play"—coal to electricity to aluminum. The unique operation, centered at Captina 10 miles south of Moundsville, involves the mining of coal, generation of electric power and

production of aluminum for fabrication—all in one major industrial complex along the Ohio river.

The new Kammer plant provides electricity for the Ormet Corporation's new aluminum reduction plant at Clarington, Ohio. Ormet was formed in August, 1956 to construct, own and operate the reduction plant for its two parent companies: Olin Mathieson Chemical Corp. and Revere Copper and Brass, Inc. Announcement of the beginning of production at Ormet was made on May 19.

Only Kammer's first turbine-gen-

erator unit is now in operation. The first of three identical 225-kilowatt units; the second and third units are scheduled for operation August and December, respectively.

The first two units are owned by Ormet Generating Corp., and Ormet subsidiary, with the bulk of their generation supplying the Ormet plant. The new Olin Mathieson aluminum rolling mill adjacent to it. The third unit is owned by the Ohio Power Company of the American Electric Power System (formerly the American Gas and Electric System), its generation and the balance of generation from the first two units be fed into the Ohio Power and A Systems.

The three-unit Kammer plant is expected to consume approximately million tons of coal per year, all which will be supplied by the new land Mine of the Consolidation Co. Coal will be delivered from the mine's cleaning plant to the power plant site via a one-third-mile conveyor system.

A unique feature of the power plant is the design of its three giant boilers to burn either coal or char or both in any proportion. Char is a by-product of the low-temperature distillation of bituminous coal. The boilers initially will burn only coal; the consumption of char will follow completion of an adjacent char processing plant by Consolidation. Construction is expected to be started late this year.

*This is not an offering of these shares for sale, or an offer to buy, or a solicitation of an offer to buy, any of such shares. The offering is made only by the prospectus.*

980,000 Shares

### Pacific Lighting Corporation

Common Stock

(Without Par Value)

Price \$47.25 per share

*Copies of the prospectus may be obtained from any of the several underwriters only in states in which such underwriters are qualified to act as dealers in securities and in which the prospectus may legally be distributed.*

Blyth & Co., Inc.

Dean Witter & Co.

The First Boston Corporation

Eastman Dillon, Union Securities & Co.

Glore, Forgan & Co.

Goldman, Sachs & Co.

Harriman Ripley & Co.

Kidder, Peabody & Co.

Lazard Frères & Co.

Lehman Brothers Merrill Lynch, Pierce, Fenner & Smith

Smith, Barney & Co.

Stone & Webster Securities Corporation White, Weld & Co.

J. Barth & Co.

Schwabacher & Co.

William R. Staats & Co.

Walston & Co., Inc.

A. C. Allyn and Company

Bateman, Eichler & Co.

A. G. Becker & Co.

Crowell, Weedon & Co. Davis, Skaggs & Co. Elworthy & Co.

First California Company

Hallgarten & Co.

Hemphill, Noyes & Co.

Hill Richards & Co.

Hornblower & Weeks

W. C. Langley & Co.

Lester, Ryons & Co.

Irving Lundborg & Co.

Mitchum, Jones & Templeton

F. S. Moseley & Co.

Paine, Webber, Jackson & Curtis

Reynolds & Co., Inc.

Shuman, Agnew & Co.

Wagenseller & Durst, Inc.

American Securities Corporation

Brush, Slocumb & Co. Inc.

Francis I. duPont & Co.

E. F. Hutton & Company Laurence M. Marks & Co.

Sutro & Co.

Bache & Co. Bingham, Walter & Hurry, Inc. J. A. Hogle & Co.

Hooker & Fay

Lawson, Levy, Williams & Stern

Mason Brothers

Revel Miller & Co.

Stern, Frank, Meyer & Fox

Spencer Trask & Co.

Weeden & Co.

Wilson, Johnson & Higgins

Wulff, Hansen & Co.

Baker, Weeks & Co.

Quincy Cass Associates

Dempsey-Tegeler & Co.

Evans MacCormack & Co.

Maxfield H. Friedman

Harbison & Henderson

Kerr & Bell

McAndrew & Co.

Shearson, Hammill & Co.

Stewart, Eubanks, Meyerson & Co.

Stone & Youngberg

Henry F. Swift & Co.

July 16, 1958.

### New Shale Oil Process Cuts Known Costs 50%

A NEW oil shale reduction process reported by the Denver Research Institute, University of Denver, as being able to extract liquid fuel from shale oil deposits at costs competitive with those for domestic petroleum.

Shirley A. Johnson, Jr., director of the Institute, claimed that a material similar to crude oil could be produced from vast shale deposits in northwestern Colorado and laid down in West Coast consuming markets at costs, exclusive of profits, of \$1.42 to \$1.60 a barrel. California crude oil currently is quoted at about \$3 to \$3.25 a barrel. The new method of extracting oil is referred to as the Aspen process and is based on a process obtained from a Swedish engineer. The original method has been considerably improved from development work done by the Denver Research Institute, it was stated. In its operation the process mixes crushed shale



a rotary retort with previously heated walnut-size balls (called ther-mospheres) composed of metal or a ceramic material. This raises the temperature of the shale to the point where the necessary chemical reaction takes place.

A 24-ton pilot plant which has been used in the studies for nine months, is undergoing revision and improvement to increase its efficiency, according to Dr. Charles H. Prien of the institute staff. He also said that it would be desirable to construct a larger plant with a capacity of 1,200 to 2,400 tons daily. Such a plant, he said, would cost about \$3 million, but could be capable of producing about 500 barrels of oil per day.

The \$9 million shale oil plant in northwestern Colorado of the Union Oil Company which was shut down recently for an indefinite period, had a capacity of 1,000 tons a day and produced 750 barrels of shale oil.

In the new shale oil process developed at the Denver Research Institute, the elimination of combustion in the main reduction units results in greater yield of shale oil and gases which can be made in turn into gasoline, diesel oil, kerosene, heating and heavy industrial oils. Dr. Prien of the institute said it was believed the shale oil could be sent through pipe lines without further treatment.

## Consumers Public Power District Building Steam & Atomic Plant

N Hallam, Nebraska, the Consumers Public Power District is commencing work on a 100,000 kilowatt steam power plant which will be operating as an atomic power facility sometime in 1962.

The site is about 22 miles southwest of Lincoln, Nebraska, and the power plant has been named the Sheldon station in honor of C. C. Sheldon who has been CPPD's treasurer since the organization was founded in 1939.

The steam power plant is supposed to be in operating condition by the spring of 1961. By 1962 all operations at Sheldon Station will be from atomic power, although the steam equipment will be kept as standby facilities for special peak use.

Atomics International, which is under contract to the AEC, will design and do the research and development work on the Power District's sodium graphite-type nuclear power plant.

This nuclear reactor will be the world's first large scale reactor of its type and will be unique in that it will

produce highly radioactive wastes that are extremely valuable for many applications in industry, medicine and allied fields.

Food processing, drug sterilization and vulcanization of rubber are specific types of uses to which radioactive isotopes, obtained in the nuclear power generating cycle, are put.

The sodium-graphite design of the Sheldon Station reactor is based on sound technology and is not likely to become out-dated by rapid developments in the nuclear energy field.

It offers maximum safety in operation since the reactor does not operate under pressure. A small scale reactor of this design has been in operation since the summer of 1957 on the outskirts of the Los Angeles area which was called the Sodium Reactor Experiment.

When the Sheldon Station is completed, it will afford the Nebraska state research institutions marvelous opportunities for experimentation in the use of radioactive materials.

## Texas Eastern Starts LP Gas Underground Storage Construction

A VAST underground storage cavern to contain liquefied petroleum gas has been given the go-ahead light by Texas Eastern Transmission Company who has started building what will be known as the Todhunter Terminal at Lebanon, Ohio.

Millard K. Neptune, senior Vice President of the company, tells us that the terminal will be located on an 89-acre tract and will be used to store and distribute LP Gas by truck and rail transport over a wide range of states from Michigan to New England.

The LP Gas will be transported to the terminal from Gulf Coast origins through the Little Big Inch petroleum products pipeline system.

Texas Eastern's cavern will be mined out of a stratum of gray shale lying about 350 feet beneath the surface of the Todhunter site. After drilling a vertical shaft to the required depth, a steel casing 42 inches in diameter will be cemented inside the shaft.

Miners will then open a small room in the shale at the base of the shaft. Corridors approximately 15 feet wide by 20 feet high will be tunneled into the shale until the required volume of space has been mined out.

Upon completion, the first cavern of the terminal will hold more than 12

million gallons of LP Gas, according to Mr. Neptune. There is sufficient land at the site, he said, to permit the construction of eight other caverns of the same size. Under present plans terminal facilities will also be constructed to refine and filter the LP Gas before it is loaded into railway tank cars and transport trucks.

Caverns such as the one started by Texas Eastern are considered ideal for storage of LP Gas both from the standpoint of safety and economy.

## Southern Cal-Edison Orders \$2 Million in Generators

TWO water-wheel generators with a value of about \$2 million have been ordered from Westinghouse Electric Corporation by the Southern California Edison Company. Each generator has a rating of 64,000 kilowatts. They will be installed at the utility's Mammoth Pool hydroelectric generating station on the San Joaquin river about 50 miles northeast of Fresno.

The generators, dam gates and other electrical and mechanical apparatus will be controlled remotely by microwave from another Big Creek powerhouse. Completion of Cal-Edison's first big outdoor hydroelectric plant is set for 1960.

## Best Way You Can Keep Informed on Utility Regulation:

### P.U.R. QUESTION SHEETS

With the least possible expenditure of time, effort and money, utility executives, lawyers, accountants, engineers and others interested in any phase of public utility regulation can keep well informed through these brief, four-page leaflets issued every two weeks.

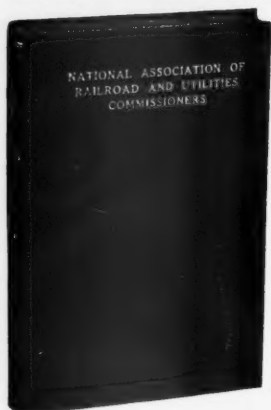
They consist of 10 questions and 10 authoritative answers based on current decisions revealing court and commission views pro and con. Annual subscription \$10.

Send your order to

Public Utilities Reports, Inc.,  
332 Pennsylvania Bldg.  
Washington 4, D. C.



**NOW AVAILABLE!  
LIMITED EDITION!**



# PROCEEDINGS 1957 CONVENTION

AT MEMPHIS, TENNESSEE

## NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS

***THIS edition contains valuable material on the subject of regulation of rates and services of public utilities and transportation companies including the following:***

Rates of Public Utilities and Transportation Agencies, Depreciation, Valuation, Railroad Passenger Deficit and Regulation of Public Utilities, Panel discussions on the subjects of "Current Trends in Airline Regulation," "Current Surface Transportation Problems," and "Nuclear Energy in the Electric Industry."

Price \$10.00 — 644 Pages

### OTHER PUBLICATIONS OF THE ASSOCIATION

#### 1957—Uniform System of Accounts for Water Utilities

For the purpose of applying the 1957 Revised System of Accounts for Water Utilities prescribed by State Commissions, the new editions have been printed in three (3) volumes:

##### Class A & B — 128 pages

Accounts for utilities having annual water operating revenues of \$250,000 or more.... \$4.50

##### Class C — 100 pages

Accounts for utilities having annual water operating revenues of \$50,000 or more and less than \$250,000 ..... 3.50

##### Class D — 64 pages

Accounts for utilities having annual water operating revenues of less than \$50,000.... 2.00

#### Local Service Telephone Rates (Revised 1957)

An excellent compilation of rates prepared by NARUC Subcommittee on "exchange rates" for all exchanges of Bell System, the rates of cities of 50,000 population or more for Bell and Independent exchanges, and tabulation of above exchanges which had ten cent coin telephone rate in effect June 30, 1957..... 2.00

#### Telephone Separations Manual (Revised 1957)

Includes the 1952 addendum, the so-called Charleston Plan and the 1956 addendum, the so-called Phoenix Plan changes ..... 2.00

#### Depreciation:

1943—1944 Reports of Committee on Depreciation. A comprehensive and complete analysis of the problems of depreciation on public utility regulation. 326 pages, paper bound.. 4.50

1946—Methods of Pricing Retirements from Group Property Accounts..... 1.25

1948—Letter Symbols for Mathematics of Depreciation..... 1.00

1948—Half Cycle Methods of Estimating Service Life..... 1.00

1950—Remaining Life Basis of Accounting for Depreciation..... .50

1955—Report of Committee on Depreciation (Discussion of Liberalized Depreciation under Internal Revenue Code of 1954)..... 1.25

1956—Report of Committee on Depreciation (Depreciation Rates for Electric Utilities).. 1.00

(When remittance accompanies order, we pay forwarding charges)

**NATIONAL ASSOCIATION OF RAILROAD AND  
UTILITIES COMMISSIONERS**

P. O. BOX 684

WASHINGTON 4, D. C.

# PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants, and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design, and construction.

*63 years of leadership in property valuation*

**The AMERICAN APPRAISAL Company** ®

Home Office: Milwaukee 1, Wisconsin  
Offices in 18 cities coast-to-coast

## BLACK & VEATCH CONSULTING ENGINEERS

Electricity, Natural Gas and Water Utilities  
Production, Transmission, Distribution  
Reports, Design, Supervision of Construction  
Investigations, Valuation and Rates  
1500 MEADOW LAKE PARKWAY, KANSAS CITY 14, MISSOURI (SINCE 1915)

## BONI, WATKINS, JASON & CO., INC.

*Economic & Management Consultants*

37 Wall Street New York 5, N. Y.	437 Shoreham Bldg. Washington 5, D. C.
Rate Cases	Management and Market Studies
Cost of Service Determination	Economic and Financial Reports
	Rate of Return Analysis

## DAY & ZIMMERMANN, INC.

**ENGINEERS & CONSTRUCTORS**

NEW YORK

PHILADELPHIA

CHICAGO

Design — Electric Line Construction — Management — Reports and Valuations



PROpane PLANTS

★ Standby

★ Augmentation

★ 100% Town Supply

Design • Engineering • Construction

**DRAKE & TOWNSEND**

11 WEST 42ND STREET NEW YORK 36, N. Y.



**Ford, Bacon & Davis**

VALUATION  
REPORTS

**Engineers**

CONSTRUCTION  
RATE CASES

NEW YORK • CHICAGO • LOS ANGELES

(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY  
(continued)



**GIBBS & HILL, INC.**

*Consulting Engineers*

**DESIGNERS • CONSTRUCTORS**

**Los Angeles**

**NEW YORK**

**Tampa**



**GILBERT ASSOCIATES, INC.**

**ENGINEERS • CONSULTANTS • CONSTRUCTORS**

**525 LANCASTER AVE.  
READING, PA.**

• WASHINGTON • PHILADELPHIA • NEW YORK

**W. C. GILMAN & COMPANY**

**CONSULTING ENGINEERS**

**ELECTRIC — GAS — TRANSIT — WATER**

*Financial and Economic Reports*

*Valuations—Rate of Return—Depreciation Studies*

*Traffic Surveys—Fare Analyses*

**55 Liberty Street**

**New York 5, N. Y.**

**Harza Engineering Company**

*Consulting Engineers*

**Calvin V. Davis**

**Richard D. Harza**

**E. Montford Fucik**

**REPORTS — DESIGN — SUPERVISION  
HYDROELECTRIC PLANTS AND DAMS — TRANSMISSION LINES — FLOOD CONTROL —  
IRRIGATION — RIVER BASIN DEVELOPMENT**

**400 West Madison Street**

**Chicago 6, Illinois**

**GUSTAV HIRSCH ORGANIZATION, INC.**

**1347 West 5th Ave., Columbus (12) Ohio**

**Telephone Hudson 8-0611**

***Consulting and Supervisory Engineers and Contractors  
Construction and Operation of Utility Enterprises***

**HOOSIER ENGINEERING COMPANY**

*Erection and Maintenance of*

*Electrical Transmission and Distribution Lines*

**1350 HOLLY AVENUE**

•

**COLUMBUS, OHIO**

**INTERNATIONAL ENGINEERING COMPANY, INC.**

*Design and Consulting Engineers*

**Dams—Power Plants—Transmission Lines—Railroads—Highways**

**Investigations—Reports—Plans and Specifications**

**Cost Estimates—Supervision of Construction**

**74 New Montgomery Street**

**San Francisco 5, California**

*Mention the FORTNIGHTLY—It identifies your inquiry*

PROFESSIONAL DIRECTORY (continued)

**JENSEN, BOWEN & FARRELL**

ENGINEERS

ANN ARBOR, MICHIGAN

APPRAISALS—INVESTIGATIONS—DEPRECIATION STUDIES—  
COST TRENDS—REPORTS  
for Rate Cases, Security Issues, Regulatory and Accounting Requirements  
ORIGINAL COST AND CONTINUING PROPERTY RECORD  
DETERMINATION



*The Kuljian Corporation*

ENGINEERS • CONSTRUCTORS

**POWER PLANT SPECIALISTS**

DESIGN • CONSTRUCTION MANAGEMENT  
SURVEYS • INVESTIGATIONS • REPORTS

1200 N. BROAD ST., PHILADELPHIA 21, PA.

**William S. Leffler, Engineers Associated**

*Utility Management Consultants for past 35 years Specializing in*

GAS  
ELECTRIC  
WATER

DEVELOPMENT OF CLASS RATES OF RETURN AND  
CLASS UNIT COST DETERMINATIONS FOR  
RATE STRUCTURE MODERNIZATION AND RATE CASES

REGULATORY  
and  
MUNICIPAL  
PROBLEMS

Send for brochure: "The Value of Cost Analysis to Management"

DARIEN, CONNECTICUT

**Pioneer Service & Engineering Co.**

CONSULTING, DESIGNING AND  
OPERATING ENGINEERS  
PURCHASING

231 SOUTH LA SALLE STREET



SPECIALISTS IN  
ACCOUNTING, FINANCING, RATES,  
INSURANCE AND DEPRECIATION

CHICAGO 4, ILLINOIS

**SANDERSON & PORTER**

CONSTRUCTION • REPORTS  
SURVEYS

NEW YORK

NEW YORK

**S & P**

**Sargent & Lundy**

ENGINEERS

*Steam and Electric Plants*

*Utilities—Industrials*

*Studies—Reports—Design—Supervision*

Chicago 3, Ill.

(Professional Directory Continued on Next Page)

PROFESSIONAL DIRECTORY  
(continued)



**STANDARD RESEARCH CONSULTANTS, INC**

Rate of Return • Valuations • Capital Costs  
Customer Surveys • Depreciation Studies  
Regional Economic Studies • Property Records

345 Hudson St.

Watkins 4-6400

New York 14, N. Y.

**Stone & Webster**  
ENGINEERING CORPORATION

DESIGN • CONSTRUCTION  
REPORTS • APPRAISALS  
EXAMINATIONS  
CONSULTING  
ENGINEERING



New York  
San Francisco

Boston

Chicago  
Los Angeles

Pittsburgh  
Seattle

Houston  
Toronto

**The J. G. WHITE ENGINEERING CORPORATION**

*Design—Construction—Reports—Appraisals  
Consulting Engineering*

80 BROAD STREET

NEW YORK 4, N. Y.

**Whitman, Requardt and Associates**

**DESIGN—SUPERVISION  
REPORTS—VALUATIONS**

Publishers of the 35-year-old  
**HANDY-WHITMAN INDEX**  
for Public Utility  
Construction Cost Trends  
Including Hydro-Electric Properties  
BALTIMORE 2, MARYLAND

1304 ST. PAUL STREET



**Abrams Aerial Survey  
Corporation**

Topographic and Planimetric Maps  
Mosaics, Plans & Profiles for all  
Engineering work.

Abrams Bldg. Lansing, Mich.

**ENGINEERS, CONSTRUCTION AND  
MAINTENANCE CONTRACTORS  
for the GAS INDUSTRY**



**CONSOLIDATED  
GAS AND SERVICE CO.**

327 So. LaSalle St., Chicago 4, Ill.

**BURNS & McDONNELL**

*Engineers - Architects - Consultants*

KANSAS CITY, MO.  
P. O. Box 7088

Phone: DElmar 3-4375

**GANNETT FLEMING CORDRY AND CARPENTER, INC.**

**ENGINEERS**

Investigations—Reports—Appraisals  
Original Cost and Depreciation Studies  
Rate Analyses—Insurance Surveys

HARRISBURG, PENNSYLVANIA

**EARL L. CARTER**  
*Consulting Engineer*

REGISTERED IN INDIANA, NEW YORK, OHIO,  
PENNSYLVANIA, WEST VIRGINIA, KENTUCKY  
*Public Utility Valuations, Reports and  
Original Cost Studies*

910 Electric Building Indianapolis, Ind.

**FRANCIS S. HABERLY**

CONSULTING ENGINEER

*Valuation—Depreciation  
Investigations and Reports*

122 SOUTH MICHIGAN AVENUE, CHICAGO

*Mention the FORTNIGHTLY—It identifies your inquiry*



## PROFESSIONAL DIRECTORY (concluded)

### JACKSON & MORELAND, INC. *Engineers and Consultants*

Design and Supervision of Construction  
Reports — Examinations — Appraisals  
Machine Design — Technical Publications  
Boston New York

### MINER AND MINER CONSULTING ENGINEERS

INCORPORATED

GREELEY

COLORADO

### PETER F. LOFTUS CORPORATION



*Design and Consulting Engineers*

Electrical • Mechanical • Structural  
Civil • Nuclear • Architectural

FIRST NATIONAL BANK BUILDING  
Pittsburgh 22, Pennsylvania

### PITTSBURGH TESTING LABORATORY

Radiography—Soils—Mechanics  
Testing—Inspection—Analysis

Main Office, Pittsburgh, Pa.

32 Laboratories in Principal Cities

### LUTZ & MAY COMPANY

*Consulting Engineers*

STEAM, GAS & DIESEL POWER STATIONS  
PUMPING PLANTS—ELECTRIC SYSTEMS  
REPORTS—DESIGNS—APPRAISALS

1009 Baltimore

Kansas City 6, Mo.

### A. S. SCHULMAN ELECTRIC CO.

*Electrical Contracting Engineers*

founded 1890

POWER STATION—INDUSTRIAL—  
COMMERCIAL—TRANSMISSION LINES—  
DISTRIBUTION

2416 S. MICHIGAN AVE., CHICAGO, ILL.  
Los Angeles

Tampa

### J. F. McMAHON ASSOCIATES, INC.

*Engineering Consultants*

INSTRUMENTATION AND CONTROL

STUDIES • REPORTS  
DESIGN • SUPERVISION

P. O. DRAWER 3908, SHAKER SQUARE STATION  
CLEVELAND 20, OHIO  
Garfield 1-4834

### The R. W. STAFFORD CO.

**GAS CONSULTANTS — ENGINEERS  
CONSTRUCTORS**

Natural Gas Conversions  
Plant Management & Operations  
Accident & Insurance Investigations  
Peak Shaving & Standby Plants

EVANSTON, ILLINOIS

2944 Grant St.

Phone UNIVERSITY 4-6190

Representation in this Professional  
Directory may be obtained at very  
reasonable rates. Kindly address  
inquiries to:

ADVERTISING DEPARTMENT

Public Utilities Fortnightly

332 Pennsylvania Bldg.

Washington 4, D. C.

### SVERDRUP & PARCEL, INC.

*Engineers — Architects*

Design, Construction Supervision  
Steam and Hydro Power Plants  
Power Systems—Industrial Plants  
Studies—Reports

St. Louis

San Francisco

Washington

### A. W. WILLIAMS INSPECTION CO., INC.

*Specialized Inspection Service*

Poles, Crossarms, Lumber, Piles, Crossties  
Preservative Treatment and Preservative Analysis  
208 Virginia St., Mobile, Ala.  
New York St. Louis Portland  
Inspectors stationed throughout the U.S.A.

Mention the FORTNIGHTLY—It identifies your inquiry

# INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

## A

Abrams Aerial Survey Corporation	32
*Allen & Company	
*Allis-Chalmers Manufacturing Company	
American Appraisal Company, The	29
*AMP Incorporated	16
Analysts Journal, The	
*Anchor Metals, Inc.	

## B

*Babcock & Wilcox Company, The	
Black & Veatch, Consulting Engineers	29
Blyth & Company, Inc.	26
Boni, Watkins, Jason & Co., Inc.	29
Burns & McDonnell, Engineers	32

## C

Carter, Earl L., Consulting Engineers	32
Cleveland Trencher Company, The	23
Columbia Gas System, Inc., The	21
Combustion Engineering, Inc.	4-5
Commonwealth Services, Inc.	25
Commonwealth Associates, Inc.	25
Consolidated Gas and Service Company	32

## D

Day & Zimmermann, Inc., Engineers	29
Delta-Star Electric Division, H. K. Porter Company, Inc.	19
Dodge Division of Chrysler Corp.	14
Drake & Townsend, Inc.	29

## E

*Eastman Dillon, Union Securities & Company	
*Ebasco Services Incorporated	
*Electro-Motive Division, General Motors	

## F

*First Boston Corporation, The	
*Fish Service Corporation	
Ford, Bacon & Davis, Inc., Engineers	29

## G

Gannett Fleming Corddry and Carpenter, Inc.	32
General Electric Company	Inside Front Cover
Gibbs & Hill, Inc., Consulting Engineers	30
Gilbert Associates, Inc., Engineers	30
Gilman, W. C., & Company, Engineers	30
*Glore, Forgan & Company	

## H

Haberly, Francis S., Consulting Engineers	32
*Hasley, Stuart & Company, Inc.	
*Harnischfeger Corporation	
*Harriman, Ripley & Company	
Harza Engineering Company	30
Hirsch, Gustav, Organization, Inc.	30
Hoosier Engineering Company	30

## I

*International Business Machines Corp.	
International Engineering Company, Inc.	30
*International Harvester Company, The	
Irving Trust Company	Inside Back Cover

## J

Jackson & Moreland, Inc., Engineers	33
Jensen, Bowen & Farrell, Engineers	31
*Justrite Mfg. Company	

## Professional Directory

29-33

\*Fortnightly advertisers not in this issue.

## K

*Kellogg, M. W., Company, The	
Kerite Company, The	7
*Kidder, Peabody & Company	
*Kuhn Loeb & Company	
Kuljian Corporation, The	31

## L

*Langley, W. C. & Co.	
Leffler, William S., Engineers Associated	31
*Lehman Brothers	
*Line Material Industries	
*Loeb (Carl M.) Rhoades & Co.	
Lofthus, Peter F., Corporation	33
Lutz & May Company, Consulting Engineers	33

## M

*Main, Chas. T., Inc., Engineers	
*Marlow Pumps Division of Bell & Gossett Co.	
McMahon, J. F. Associates, Inc.	33
*Merrill Lynch, Pierce, Fenner & Smith	
Miner & Miner, Consulting Engineers	33
Morgan Stanley & Company	24

## N

National Association of Railroad & Utilities Commissioners	28
Newport News Shipbuilding & Dry Dock Company	13

## O

*Osmose Wood Preserving Co. of America, Inc.	
--	--

## P

*Pacific Pumps, Inc.	
Pioneer Service & Engineering Company	31, Outside Back Cover
Pittsburgh Testing Laboratory	33
Porter, H. K., Company Inc., Delta-Star Electric Division	19

## R

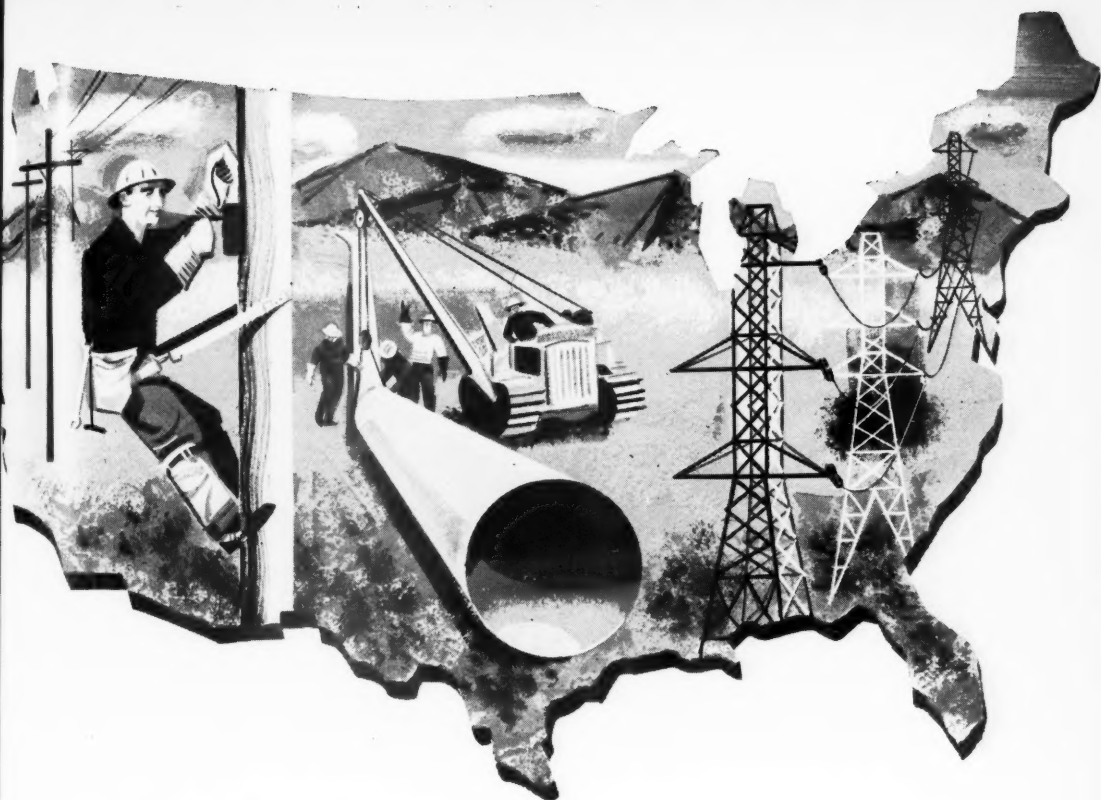
Recording & Statistical Corporation	11
Remington Rand Div. of Sperry Rand Corp.	9
Robertson, H. H., Company	15

## S

Sanderson & Porter, Engineers	31
Sargent & Lundy, Engineers	31
Schulman, A. S., Electric Co., Engineers	33
*Smith, Barney & Company	
*Southern Pipe Coating Company	
Stafford, R. W., Company, The, Consultants	33
Standard Research Consultants, Inc.	32
Stone and Webster Engineering Corporation	32
Sverdrup & Parcel, Inc., Engineers	33

## W

*Westinghouse Electric Corporation	
White, J. G., Engineering Corp., The	32
*White, Weld & Co.	
Whitman, Requardt and Associates	32
Williams, A. W., Inspection Company, Inc.	33



## *Lifelines of the nation!*

Playing a dynamic role in the economy of our nation, the investor-owned Utility Industry continues to expand its lifelines of service. Not only meeting the needs of today's consumers, but preparing also for an atomic age, Utilities are faced with enormous capital expansion requirements.

To assist in the many financial complexities accompanying this growth, Irving specialists are ready with new and sound approaches. Our Analytical Studies, Seminars, and Round Tables, may bring added vitality to your capital planning, financing, or cultivation of the financial community.

For more information, call Public Utilities Department at DIgby 4-3500  
or write us at One Wall Street

## **IRVING TRUST COMPANY**

*One Wall Street, New York 15, N.Y.*

Capital Funds over \$130,000,000

Total Assets over \$1,600,000,000

RICHARD H. WEST, Chairman of the Board

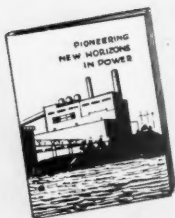
GEORGE A. MURPHY, President

Public Utilities Department—JOHN F. CHILDS, Vice President in Charge

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

The design work on all these new substations is going to be hard to handle with our present force.

Of course! They have enough to do handling routine duties. Why don't you call in Pioneer?



#### **NEW!**

On your letterhead, write for 40-page booklet, "Pioneering New Horizons in Power." Describes, illustrates Pioneer's engineering services, and corporate services, from financing to operation.

## **GIVE YOUR NON-ROUTINE OPERATIONS TO PIONEER**

### **Design and Consulting Engineering Services**

Pioneer has specialized in designing power plants for 56 years. It offers design service for fossil fuel, hydro and atomic plants. It will also assist in forecasting load growth, in site selection, in purchasing and expediting of equipment and in supervising construction. Pioneer's other services include substation, transmission and distribution studies and design.

### **Services in Regulatory Matters**

Pioneer offers its services in all phases of Federal, State and Local regulation including the rate base, depreciation analysis, cost of service studies, market analysis... certificate proceedings and rate of return.

### **Corporate Services**

Pioneer's services in corporate matters include business and management engineering advice, financial, accounting and tax counsel and insurance and pension plans and programming. It operates a stock transfer and dividend disbursement service and maintains stock ledgers when desired.



## **Pioneer Service & Engineering Co.**

231 South La Salle Street  
Chicago 4, Illinois